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**NOTE**

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From:	General Secretariat of the Council
To:	Council
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Subject:	Proposal for a Regulation of the European Parliament and of the Council on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry into the 2030 climate and energy framework and amending Regulation No 525/2013 of the European Parliament and the Council on a mechanism for monitoring and reporting greenhouse gas emissions (First reading) - General approach

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## I. INTRODUCTION

1. At its meeting on 23-24 October 2014, the European Council agreed on the 2030 climate and energy policy framework for the European Union and endorsed a binding EU target of an at least 40% domestic reduction in greenhouse gas emissions by 2030 compared to 1990<sup>1</sup>. This target also represents the Intended Nationally Determined Contribution (INDC) of the EU and its Member States, which was submitted to the UNFCCC on 6 March 2015. The European Council conclusions contain specific guidance, *inter alia*, on the methodology to be used for setting the national emission reduction targets for 2030 in the non-ETS sectors, and on the availability and use of flexibility instruments within those sectors.
2. On 20 July 2016, the Commission adopted two legislative proposals on the contribution of the non-ETS sectors towards the overall effort: on binding annual greenhouse gas emissions reductions by Member States from 2021 to 2030 ("Effort Sharing Regulation")<sup>2</sup> and on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry into the 2030 climate and energy framework ("LULUCF Regulation")<sup>3</sup>. Together with the proposal for the revision of the EU ETS, they are intended to ensure achievement of the EU's overall target for greenhouse gas emissions reductions by 2030 and the commitments of the EU and the Member States under the Paris Agreement.
3. The proposed LULUCF Regulation, which builds on the existing EU-wide accounting rules laid down in Decision No 529/2013/EU, aims to include the LULUCF sector in the 2030 climate and energy policy framework. The proposal requires Member States to ensure that overall their LULUCF sector does not generate net emissions ("no-debit rule") and sets out accounting rules for specific land use sectors. The proposal also introduces a new EU governance process for the determination of forest management reference levels.

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<sup>1</sup> Doc. EUCO 169/14

<sup>2</sup> Doc. 11483/16 + ADD 1 + ADD 2 + ADD 3.

<sup>3</sup> Doc. 11494/16 + ADD 1 + ADD 2 + ADD 3.

4. In the European Parliament, Mr Norbert LINS (EPP, DE) has been appointed as rapporteur for the proposal on behalf of the ENVI Committee. On 13 September 2017, the Parliament adopted 64 amendments to the Commission's proposal.
5. The Economic and Social Committee and the Committee of the Regions delivered their opinions on 14 December 2016 and 22-23 March 2017, respectively.
6. At Council (Environment) level the proposal has been discussed at the latest on 19 June 2017, together with the proposal on the Effort Sharing Regulation on the basis of a progress report<sup>4</sup>.
7. On 27 September 2017, the Permanent Representatives Committee examined the proposal on the basis of a compromise text of the Presidency<sup>5</sup> and agreed to forward the proposal to the Council (Environment) in view of reaching a general approach at its meeting on 13 October 2017.

From the discussion, the Presidency drew the conclusion that the Presidency compromise as it stands represents a delicate balance and that the key outstanding issues relating to the managed forest land flexibility would have to be resolved at the political level.

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<sup>4</sup> Doc. 9861/17.

<sup>5</sup> Doc. 12330/17

8. Accordingly, the Presidency decided only to adjust the text to a limited extent:
- further clarifications in relation to setting the forest reference levels have been included in the text targeted at very specific country related circumstances (recital 9 and Annex IV);
  - recital 10 relating to the provisions on "governance" has been strengthened;
  - the text in recital 15 on reporting has been strengthened.

The amended Presidency compromise is set out in the Annex to this note<sup>6</sup>.

## II. STATE OF PLAY

9. Throughout discussions on the proposal, the main point of divergence among Member States has been the accounting rules for managed forest land and in particular the reference period for the forest reference level.

A number of Member States have supported the Commission proposal to have a forest reference level based on a historical period, arguing that this would best ensure the environmental integrity of the proposal as it would exclude influences from recent policies. However, for a number of other Member States such a historical period seems rather arbitrary and disadvantageous due to the fact that national circumstances differ from one Member State to the other. They would find it difficult to continue sustainable forest management practices which in some cases would mean increasing harvesting rates in comparison to the reference period. They have argued for different periods, many for more recent periods, wishing to include future policies.

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<sup>6</sup> New Presidency suggestions compared to the previous text are marked as **bold and underlined**. Deletions are indicated by [...]. Previous changes to the initial Commission proposal are indicated in the present text as underlined.

10. In order to provide a way forward, another approach was suggested whereby the Commission proposal on the forest reference level was maintained (however changing the reference period to 2000 - 2009) while allowing Member States to reduce their accounted emissions for managed forest land to a certain extent. This approach did not gather sufficient support, inter alia as a very large number of Member States insisted on maintaining the accounting rules as proposed by the Commission.
11. The Presidency subsequently proposed to maintain the accounting rules as suggested by the Commission and in turn add an additional flexibility for Member States in the form of a managed forest land flexibility. This new flexibility would allow Member States to compensate emissions in order to comply with the commitment in Article 4 (the "no debit rule").

The use of the flexibility is subject to certain conditions to ensure that the environmental integrity of the proposal is maintained, inter alia that it will only be applied if LULUCF emissions and removals are balanced in the EU as a whole (the "EU no debit condition") and Member States have put in place or will put in place concrete measures to ensure the conservation or enhancement, as appropriate, of sinks and reservoirs from forests at the latest by 2050. In addition, Member States can only get compensation up to a maximum amount and only up to the level where their forests still generate a sink. These conditions should provide Member States with incentives to maintain and enhance their sink over the 10 year period of the LULUCF Regulation.

In turn, a fixed number of potential compensation is available to each Member State based on their average sink for the period of 2000 to 2009 that can be used over the 10 year period providing Member States with certain flexibility and predictability. The individual amounts of compensation add up to a total of 360 Mt CO<sub>2</sub> equivalent over 10 years, a bit less than 10% of the total EU sink during the reference period 2000 to 2009. Member States' relative share would be increased as a function of their forest coverage and size.

12. Following intense discussions, the approach to base the forest reference level on the period 2000 to 2009 and to provide flexibility to Member States in the form of a separate managed forest land flexibility is now accepted by all delegations as being the basis for finding agreement on the LULUCF proposal.

The overall architecture of the new flexibility is supported by a very large majority. A number of delegations highlight in particular that maintaining the proposed accounting rules, the historic reference period as a basis for setting the forest reference level, the EU no debit condition and the exclusion of deforestation from the new flexibility are key elements for them.

A considerable number of delegations are ready to support the proposal on managed forest land flexibility as it is. Some condition their support on not touching further the balance and elements of the compromise.

However, a number of delegations still have concerns on some of the modalities of the flexibility and/or the total amount of compensation. In particular:

- a) A number of delegations maintain reservations on the overall amount of compensation (Annex VII) as proposed by the Presidency and argue for a lower amount. Some of these delegations would also have preferred basing the compensation on future sinks instead of past sinks, arguing that this would provide a better incentive to maintain and enhance sinks.

- b) Some other delegations maintain reservations on the criteria for calculating the amount of compensation, specifically the differentiation between Member States based on forest area and land area, arguing that they are arbitrary and unfair. They prefer a more linear distribution among Member States. One delegation has tabled a proposal to this effect which would provide each Member State with a compensation of 12% of their average yearly sink 2000 - 2009, with the option of adding low past harvest intensity as a further distribution criterion (below EU average). This proposal has been received with support or interest from a few other delegations.
- c) A few delegations maintain their concerns on the "EU no debit condition" (Article 11a (2) b)).

13. Two delegations argue that they are in particular circumstances and therefore that the compromise as proposed by the Presidency currently does not sufficiently address their problems.

- (a) One delegation has raised problems related to deforestation (in particular related to the past). The Member State has a very high forest coverage and due to other geographic circumstances has limited possibilities for further afforestation. The delegation proposes to allow for compensation for deforestation under certain conditions (forest coverage above 60% and only for deforestation that happened until the end of 2020) and to raise its amount of compensation.

While being met with some understanding, most delegations have not been in a position to pronounce themselves on the proposal at this stage.

- (b) Another delegation has referred to it being impacted in the reference period by a past "catastrophic" event and has proposed that the Commission should either be able to grant a derogation from the reference period or the Member State should receive a higher amount of compensation.

The Presidency, cf. above, proposes to meet the raised concerns by adding further clarifications in relation to setting the forest reference levels to take into account such events.

14. In order to accommodate specific concerns in relation to taking into account the age structure of forests when determining the forest reference level, the Commission has agreed to make a statement on the application of the relevant provisions.

**V. CONCLUSION**

15. The Council is invited to adopt a general approach on the basis of the text set in the Annex to this note.

The general approach will constitute the Council's mandate for negotiations with the European Parliament in the context of the Ordinary Legislative Procedure.

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Proposal for a

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

**on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry into the 2030 climate and energy framework and amending Regulation (EU) No 525/2013 [...] and Decision No 529/2013/EU**

(Text with EEA relevance)

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 Committee<sup>7</sup>,

Having regard to the opinion of the Committee of the Regions<sup>8</sup>,

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) A binding target of at least a 40% domestic reduction in economy-wide greenhouse gas emissions by 2030 compared to 1990 was endorsed in the [...] European Council conclusions of 23-24 October 2014 on the 2030 climate and energy policy framework and this was reconfirmed in its conclusions of 17-18 March 2016. [...]

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<sup>7</sup> OJ C [...], [...], p. [...].

<sup>8</sup> OJ C [...], [...], p. [...].

- (2) The European Council conclusions of 23-24 October 2014 stated that the target should be delivered collectively by the Union in the most cost-effective manner possible, with the reductions in the Union emissions trading system ("EU ETS") laid down in Directive 2003/87/EC of the European Parliament and of the Council<sup>9</sup> and non-ETS sectors amounting to 43% and 30% by 2030 compared to 2005 respectively, with efforts distributed on the basis of relative GDP per capita.
- (3) This Regulation also forms part of the implementation of the Union commitments under the Paris Agreement<sup>10</sup> adopted under the United Nations Framework Convention on Climate Change ("UNFCCC") which was ratified on behalf of the Union on 5 October 2016 in accordance with Council Decision (EU) 2016/1841<sup>11</sup>. The commitment of the Union to economy-wide emission reductions is contained in the intended nationally determined contribution submitted in view of the Paris Agreement by the Union and its Member States to the Secretariat of the UNFCCC on 6 March 2015. The Paris Agreement entered into force on 4 November 2016. [...]
- (4) The Paris Agreement sets out a long-term goal in line with the objective to keep the global temperature increase well below 2°C above pre-industrial levels and to pursue efforts to keep it to 1.5°C above pre-industrial levels. In order to achieve this goal, the Parties should prepare, communicate and maintain successive nationally determined contributions. The Paris Agreement replaces the approach taken under the 1997 Kyoto Protocol, which will not be continued beyond 2020. The Paris Agreement also calls for a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, and invites Parties to take action to conserve and enhance, as appropriate, sinks and reservoirs of greenhouse gases, including forests.

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<sup>9</sup> 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).

<sup>10</sup> Paris Agreement (OJ L 282, 19.10.2016, p. 4).

<sup>11</sup> 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).

- (5) The European Council of 23-24 October 2014 [...] acknowledged the multiple objectives of the agriculture and land use sector, with their lower mitigation potential as well as the need to ensure coherence between the Union food security and climate change objectives. The European Council invited the Commission to examine the best means of encouraging the sustainable intensification of food production, while optimising the sector's contribution to greenhouse gas mitigation and sequestration, including through afforestation, and to establish policy on how to include land use, land use change and forestry ('LULUCF') into the 2030 greenhouse gas mitigation framework as soon as technical conditions allow and in any case before 2020.
- (6) The LULUCF sector can contribute to climate change mitigation in several ways, in particular by reducing emissions, and maintaining and enhancing sinks and carbon stocks. In order for measures aiming in particular at increasing carbon sequestration to be effective, the long-term stability and adaptability of carbon pools is essential.
- (7) Decision No 529/2013/EU of the European Parliament and of the Council<sup>12</sup>, as a first step, set out accounting rules applicable to [...] emissions and removals from the LULUCF sector and thereby contributed to policy development towards the inclusion of the LULUCF sector in the Union's emission reduction commitment. This Regulation should build on the existing accounting rules, updating and improving them for the period 2021-2030. It should lay down the obligations of Member States in implementing those accounting rules and the obligation to ensure that the overall LULUCF sector [...] does not generate net emissions and contributes to the aim of enhancing sinks in the long-term. It should not lay down any accounting or reporting obligations for private parties.

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<sup>12</sup> Decision No 529/2013/EU of the European Parliament and of the Council of 21 May 2013 on accounting rules on greenhouse gas emissions and removals resulting from activities relating to land use, land-use change and forestry and on information concerning actions relating to those activities (OJ L 165, 18.6.2013, p. 80)

- (8) In order to determine accurate accounts of emissions and removals in accordance with the 2006 Intergovernmental Panel on Climate Change ('IPCC') Guidelines for National Greenhouse Gas Inventories ('IPCC Guidelines'), the annually reported values under Regulation (EU) No 525/2013 of the European Parliament and of the Council<sup>13</sup> for land use categories and the conversion between land use categories should be utilised, thereby streamlining the approaches used under the UNFCCC and the Kyoto Protocol. Land that is converted to another land use category should be considered in transition to that category for the default value of 20 years in the IPCC Guidelines. Changes in the IPCC Guidelines as adopted by the Conference of the Parties to the UNFCCC or the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement should be reflected, as appropriate, in reporting requirements under this Regulation.
- (9) Emissions and removals from forest land depend on a number of natural circumstances, [...] dynamic age related forests characteristics, as well as past and present management practices. The use of a base year would not make it possible to reflect those factors and resulting cyclical impacts on emissions and removals or their interannual variation. The relevant accounting rules should instead provide for the use of reference levels to exclude the effects of natural and country-specific characteristics, **including the occupation of territory, war time and post war circumstances impacting forest management during the reference period.** [...] Forest reference levels should take account of any unbalanced age structure of forest and should not unduly constrain the future forest management intensity, with the aim of maintaining or strengthening long-term carbon sink.

[...]

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<sup>13</sup> Regulation (EU) No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change and repealing Decision No 280/2004/EC (OJ L 165, 18.6.2013, p. 13).

- (9a) In the absence of the international review under the UNFCCC or the Kyoto Protocol, a review procedure should be established to ensure transparency and improve the quality of accounting in this category.
- (10) When the Commission assesses [...] the national forestry accounting reports, including the forest reference levels proposed therein, it should build on the good practice and experience of the expert reviews under the UNFCCC, including as regards participation of national experts [...]. **The Commission should ensure that experts from the Member States [...] are involved in the technical assessment of whether the proposed forest reference levels have been determined in accordance with the [...] criteria and requirements set out in this Regulation.**
- (11) The internationally agreed IPCC Guidelines state that emissions from the combustion of biomass can be accounted as zero in the energy sector with the condition that these emissions are accounted for in the LULUCF sector. In the [...] Union, emissions from biomass combustion are accounted as zero pursuant to Article 38 of Commission Regulation (EU) No 601/2012<sup>14</sup> and the provisions set out in Regulation (EU) No 525/2013, hence consistency with the IPCC Guidelines would only be ensured if these emissions [...] are reflected [...] accurately under this Regulation.
- (12) The increased sustainable use of harvested wood products can substantially limit emissions into and enhance removals of greenhouse gases from the atmosphere. The accounting rules should ensure that Member States accurately and transparently reflect in accounts the changes in the harvested wood products pool when they take place, to provide incentives for enhanced use of harvested wood products with long life cycles. The Commission should provide guidance on methodological issues related to the accounting for harvested wood products.

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<sup>14</sup> Commission Regulation (EU) no 601/2012 of 21 June 2012 on the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council (OJ L 181, 12.7.2012, p. 30).

- (13) Natural disturbances, such as wildfires, insect and disease infestations, extreme weather events and geological disturbances that are beyond the control of, and not materially influenced by, a Member State, may result in greenhouse gas emissions of a temporary nature in the LULUCF sector, or may cause the reversal of previous removals. As reversal can also be the result of management decisions, such as decisions to harvest or plant trees, this Regulation should ensure that human-induced reversals of removals are always accurately reflected in LULUCF accounts. Moreover, this Regulation should provide Member States with a limited possibility to exclude emissions resulting from disturbances that are beyond their control from their LULUCF accounts. However, the manner in which Member States apply those provisions should not lead to undue under-accounting.
- (14) Depending on national preferences, Member States should be able to choose adequate national policies for achieving their commitments in LULUCF, including the possibility of [...] balancing emissions from one land category with removals from another land category. They should also be able to cumulate net removals over the period 2021-2030. Trading among Member States should continue as an additional option or alternatively, Member States should be able to use annual emissions allocations established pursuant to Regulation [ESR] for compliance under this Regulation. [...]
- (14a) Forest land managed in a sustainable way normally generates a sink, contributing to climate mitigation. In [...] the reference period 2000-2009 the reported average sink [...] from managed forest land was 372 million tonnes CO2 equivalent per year for the Union as a whole. The Member states should ensure the conservation and enhancement, as appropriate, of sinks and reservoirs from forests with the view to achieving the purpose of the Paris Agreement and meeting the ambitious greenhouse gas emissions reduction targets of the Union by 2050.

- (14b) [...] Removals from managed forest land are accounted against [...] a forward-looking forest reference level. The projected future sink is based on an extrapolation of forest management practices and intensity from a reference period. A decrease in sink relative to the reference level is accounted as emissions. [...] Specific national circumstances and practices, such as lower harvest intensity than usual or aging forests during the reference period, [...] should be taken into account.
- (14c) Member States should therefore be granted some flexibility to temporarily increase their harvest intensity in accordance with sustainable forest management practices consistent with the objective set out in the Paris Agreement provided that within the Union total emissions do not exceed removals in the overall LULUCF sector. Under this flexibility, all Member States should be granted a basic amount calculated on the basis of a compensation factor expressed as a percentage of their reported sink in the years from 2000 to 2009 to compensate for its accounted emissions from managed forest land. It should be ensured that Member States could only be compensated up to the level where their forest will no longer generate a sink.
- (14d) More forested and in particular smaller forested Member States are more dependent on managed forest land to balance emissions in other accounting categories and will therefore be affected to a higher degree and will have a limited potential to increase their forest coverage. The percentage should be increased on the basis of forest coverage and land area so that Member States with a very small land area and very high forest coverage compared to the Union average would be granted the highest percentage of their sink for the reference period.

- (15) **To monitor the progress of Member States towards meeting their commitment under this Regulation and to ensure the transparency, accuracy, consistency, completeness and comparability of information on emissions and removals, Member States should provide the Commission with the relevant greenhouse gas inventory data.** In order to ensure efficient, transparent and cost-effective reporting and verification of greenhouse gas emissions and removals and of other information necessary to assess compliance with Member States' commitments, reporting requirements should be included in Regulation (EU) No 525/2013 [...], and compliance checks under this Regulation should take those reports into account. [...]. **If a Member State [...] intends to apply the flexibility regarding managed forest land, it should include in the compliance report the amount of compensation [...] that it intends to use.**
- (15a) Regulation (EU) No 525/2013 should be amended accordingly.
- (15b) Decision No 529/2013/EU should continue to apply to the accounting and reporting obligations for the accounting period from 1 January 2013 to 31 December 2020. For the accounting periods from 1 January 2021, this Regulation should apply.
- (15c) Decision No 529/2013/EU should be amended accordingly.
- (16) The European Environment Agency should assist the Commission, as appropriate in accordance with its annual work programme, with the system of annual reporting of greenhouse gas emissions and removals, the assessment of information on policies and measures and national projections, the evaluation of planned additional policies and measures, and the compliance checks carried out by the Commission under this Regulation.

- (17) To facilitate data collection and methodology improvement, land use should be inventoried and reported using geographical tracking of each land area, corresponding to national and [...] Union data collection systems. The best use should [...] be made of existing Union and Member State programmes and surveys [...] for data collection. Data management, including sharing for the reporting reuse and dissemination should conform to Directive 2007/2/EC of the European Parliament and of the Council <sup>15</sup>[...].
- (18) In order to provide for the appropriate accounting of transactions under this Regulation, including the use of flexibilities and tracking compliance, 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 in respect of [...] technical adaptation of definitions, including the minimum values for the definition of forests, lists of greenhouse gases and carbon pools, [...] [...], the accounting of transactions and the revision of methodology and information requirements regarding natural disturbances. [...] The necessary provisions should be contained in a single [...] instrument combining the accounting provisions pursuant to Directive 2003/87/EC, Regulation (EU) No 525/2013, Regulation [ESR] [...] and this Regulation. 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 Inter-institutional Agreement of 13 April 2016 on Better Law-Making. 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 have systematic access to meetings of Commission expert groups dealing with the preparation of delegated acts.

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<sup>15</sup> Directive 2007/2/EC of the European Parliament and of the Council of 14 March 2007 establishing an Infrastructure for Spatial Information in the European Community (INSPIRE) (OJ L 108, 25.4.2007, p. 1).

- (18a) In order to ensure uniform conditions for the implementation of [...] the provisions on accounting of managed forest land by the Member States [...], implementing powers should be conferred on the Commission to lay down the forest reference levels of Member States for the periods from 2021 to 2025 and 2026 to 2030 respectively. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council<sup>16</sup>. [...]
- (19) This Regulation should be reviewed as of 2024 and in 2029 [...] in order to assess its overall functioning. The review should take into account, inter alia, evolving national circumstances and be [...] informed by the results of the 2018 Facilitative Dialogue and the Global Stocktake under [...] the Paris Agreement.
- (20) Since the objectives of this Regulation, in particular to set out Member States' commitments on LULUCF in order to meet the greenhouse gas emission reduction target of the Union for the period from 2021 to 2030, cannot be sufficiently achieved by the Member States but can rather, by reason of its scale and effects be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty of the European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives,

HAVE ADOPTED THIS REGULATION:

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<sup>16</sup> 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).

## *Article 1*

### **Subject matter**

This Regulation sets out Member States' commitments on land use, land use change and forestry ('LULUCF') that contribute to meeting the greenhouse gas emission reduction target [...] of the Union for the period from 2021 to 2030, as well as the rules for the accounting of emissions and removals from LULUCF and checking the compliance of Member States with these commitments.

## *Article 2*

### **Scope**

1. This Regulation applies to emissions and removals of the greenhouse gases listed in Section A of Annex I [...], as reported pursuant to Article 7 of Regulation (EU) No 525/2013 occurring in any of the following land accounting categories on the territories of Member States during the period from 2021 to 2030:
  - (a) afforested land: land use reported as cropland, grassland, wetlands, settlements, and other land converted to forest land;
  - (b) deforested land: land use reported as forest land converted to cropland, grassland, wetlands, settlements, and other land;
  - (c) managed cropland: land use reported as cropland remaining cropland and grassland, wetland, settlement, other land converted to cropland and cropland converted to wetland, settlement and other land;
  - (d) managed grassland: land use reported as grassland remaining grassland and cropland, wetland, settlement, other land converted to grassland and grassland converted to wetland, settlement and other land;
  - (e) managed forest land: land use reported as forest land remaining forest land.

2. A Member State may [...] include emissions and removals of the greenhouse gases listed in Section A of Annex I as reported pursuant to Article 7 of Regulation (EU) No 525/2013 occurring in the land accounting category managed wetland, [...] (land use reported as wetland remaining wetland, and settlement, other land converted to wetland and wetland converted to settlement and other land), on its territory, in the scope of its commitment pursuant to Article 4 of this Regulation. [...] This Regulation also applies to such emissions and removals included by a Member State.
3. Where a Member State intends to include managed wetland in accordance with paragraph 2, it shall notify the Commission thereof by 31 December 2020 for the period from 2021 to 2025 and by 31 December 2025 for the period from 2026 to 2030.

### *Article 3*

#### **Definitions**

1. For the purposes of this Regulation, the following definitions shall apply:

[...]

- (a) ‘sink’ means any process, activity or mechanism that removes a greenhouse gas, an aerosol, or a precursor to a greenhouse gas from the atmosphere;
- (b) ‘source’ means any process, activity or mechanism that releases a greenhouse gas, an aerosol or a precursor to a greenhouse gas into the atmosphere;
- (c) ‘carbon stock’ means the mass of carbon stored in a carbon pool;
- (d) ‘carbon pool’ means the whole or part of a biogeochemical feature or system within the territory of a Member State within which carbon, any precursor to a greenhouse gas containing carbon or any greenhouse gas containing carbon is stored;
- (e) ‘harvested wood product’ means any product of wood harvesting that has left a site where wood is harvested;

- (f) ‘forest’ means an area of land defined by the minimum values for area size, tree crown cover or an equivalent stocking level, and potential tree height at maturity at the place of growth of the trees as specified for each Member State in [...] Annex II. It includes areas with trees, including groups of growing young natural trees, or plantations that have yet to reach the minimum values for tree crown cover or equivalent stocking level or minimum tree height as specified in [...] Annex II, including any area that normally forms part of the forest area but on which there are temporarily no trees as a result of human intervention, such as harvesting, or as a result of natural causes, but which area can be expected to revert to forest;
- (fa) ‘forest reference level’ means an estimate of the average annual net emissions or removals resulting from managed forest land within the territory of the Member State in the periods from 2021 to 2025 and from 2026 to 2030 based on the criteria set out in this Regulation; the forest reference level is expressed in tonnes of CO<sub>2</sub> equivalent per year;
- (fb) ‘half-life value’ means the number of years it takes for the quantity of carbon stored in a harvested wood products category to decrease to one half of its initial value;
- [...]
- (g) ‘natural disturbances’ mean any non-anthropogenic events or circumstances that cause significant emissions in forests and the occurrence of which are beyond the control of the relevant Member State, provided the Member State is objectively unable to significantly limit the effect of the events or circumstances, even after their occurrence, on emissions;
- (h) ‘instantaneous oxidation’ means an accounting method that assumes that the release into the atmosphere of the entire quantity of carbon stored in harvested wood products occurs at the time of harvest.

2. The Commission [...] is empowered to adopt delegated acts in accordance with Article 14, to amend or delete the definitions contained in paragraph 1, or add new definitions therein, in order to adapt paragraph 1 to scientific developments or technical progress and to ensure consistency between those definitions and any changes to relevant definitions in the [...] IPCC Guidelines for National Greenhouse Gas Inventories ('IPCC Guidelines') as adopted by the Conference of the Parties to the UNFCCC or the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement.

#### *Article 4*

#### **Commitments**

For the period from 2021 to 2025 and from 2026 to 2030, taking into account the flexibilities provided for in Articles 11 and 11a, each Member State shall ensure that emissions do not exceed removals, calculated as the sum of total emissions and removals on their territory in the land accounting categories referred to in Article 2 combined, as accounted in accordance with this Regulation.

#### *Article 5*

#### **General accounting rules**

1. Each Member State shall prepare and maintain accounts that accurately reflect the emissions and removals resulting from the land accounting categories referred to in Article 2. Member States shall ensure the accuracy, completeness, consistency, comparability and transparency of their accounts and of other data provided under this Regulation. Member States shall denote emissions by a positive sign (+) and removals by a negative sign (-).
2. Member States shall prevent any double counting of emissions or removals, in particular by [...] ensuring that emissions and removals are not accounted under more than one land accounting category.

3. Member States shall transition forest land, cropland, grassland, wetland, settlements and other land from the category of such land converted to another type of land to the category of such land remaining the same type of land after 20 years from the date of conversion.
4. Member States shall include in their accounts for each land accounting category any change in the carbon stock of the carbon pools listed in Section B of Annex I [...]. Member States may choose not to include in their accounts changes in carbon stocks for carbon pools where the carbon pool is not a source, except for above-ground biomass and harvested wood products on managed forest land.
5. Member States shall maintain a complete and accurate record of all data used in preparing their accounts.
6. The Commission [...] is empowered to adopt delegated acts in accordance with Article 14 to amend Annex I in order to reflect changes in the IPCC Guidelines as adopted by the Conference of the Parties to the UNFCCC or the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement.

#### *Article 6*

#### **Accounting for afforested land and deforested land**

1. Member States shall account for emissions and removals resulting from afforested land and deforested land, as the total emissions and removals for each of the years in the periods from 2021 to 2025 and from 2026 to 2030.
2. By derogation from the requirement to apply the default value established in Article 5(3), a Member State may transition cropland, grassland, wetland, settlements and other land from the category of such land converted to forest land to the category of forest land remaining forest land after 30 years from the date of conversion, if [...] justified in line with IPCC Guidelines.

3. In calculations for emissions and removals on afforested land and deforested land, each Member State shall determine the forest area using the [...] parameters [...] specified in [...] Annex II.

#### *Article 7*

##### **Accounting for managed cropland, managed grassland and managed wetland**

1. Member States shall account for emissions and removals resulting from managed cropland calculated as emissions and removals in the periods from 2021 to 2025 and from 2026 to 2030 minus the value obtained by multiplying by five the Member State's average annual emissions and removals resulting from managed cropland in its base period from 2005 to 2009.
2. Member States shall account for emissions and removals resulting from managed grassland calculated as emissions and removals in the periods from 2021 to 2025 and from 2026 to 2030 minus the value obtained by multiplying by five the Member State's average annual emissions and removals resulting from managed grassland in its base period from 2005 to 2009.
3. [...]
4. Member States that [...] include managed wetland [...] in accordance with Article 2 shall account for emissions and removals resulting from managed wetland, calculated as emissions and removals in the periods from 2021 to 2025 and/or from 2026 to 2030 minus the value obtained by multiplying by five the Member State's average annual emissions and removals resulting from managed wetland in its base period from 2005 to 2009.

#### *Article 8*

##### **Accounting for managed forest land**

1. Member States shall account for emissions and removals resulting from managed forest land, calculated as emissions and removals in the periods from 2021 to 2025 and from 2026 to 2030 minus the value obtained by multiplying by five [...] the forest reference level of the Member State concerned [...].

2. Where the result of the calculation referred to in paragraph 1 is negative in relation to a Member State forest reference level, the Member State concerned shall include in its managed forest land accounts total net removals of no more than the equivalent of 3,5 % of the [...] emissions of that Member State in its base year or period as specified in Annex III, multiplied by five. [...] Net removals resulting from the carbon pool of harvested wood products of managed forest land shall not be subject to this limitation.

[...]

3. Member States shall determine their [...] forest reference level based on the criteria set out in Section A of Annex IV [...]. They shall submit to the Commission a national forestry accounting [...] report, including [...] a proposed forest reference level, by [31 December 2018]<sup>17</sup> for the period from 2021 to 2025 and by 30 June 2023 for the period from 2026 to 2030. The national forestry accounting report [...] shall contain all the elements listed in Section [...] B of Annex IV [...].

4. The forest reference level shall be based on the continuation of [...] sustainable forest management practice and intensity, as documented between 2000-2009 [...] with regard to dynamic age related forests characteristics in national forests [...]. For the purpose of determining the forest reference level, a constant ratio between solid and energy use of forest biomass as documented in the period from 2000 to 2009 shall be assumed.

[...] Member States shall demonstrate consistency between the methods and data used to [...] determine the [...] proposed forest reference level in the national forestry accounting report and those used in the reporting for managed forest land. [...].

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<sup>17</sup> The date should be decided at a later stage taking account of the time of adoption of the draft Regulation.

5. The Commission, [...] in consultation with experts [...] appointed by the Member States, shall [...] undertake a technical assessment of the national forestry accounting reports submitted by Member States in accordance with paragraph 3 of this Article [...] with a view to [...] assessing the extent to which the proposed [...] forest reference levels have been determined in accordance with the principles and requirements set out in paragraphs 3 and 4 of this Article, as well as Article 5(1). [...]The Commission shall publish a summary of the work carried out, including the views expressed by the experts appointed by the Member States, and the conclusions thereof.

The Commission may [...] issue technical recommendations to the Member States reflecting the conclusions of the [...] technical assessment [...] to facilitate the technical revision of the proposed [...] forest reference levels [...]. The Commission shall publish the technical recommendations [...].

5a. Where necessary based on the technical [...] assessments and, where applicable, the technical recommendations, Member States shall communicate [...] their revised proposed forest reference levels to the Commission by 31 December 2019 for the period from 2021 to 2025 and by 30 June 2024 for the period from 2026 to 2030. The Commission shall publish the proposed forest reference levels communicated by Member States.

6. Based on [...] the proposed forest reference levels submitted by Member States, the Commission shall, in light of the [...] technical assessment carried out pursuant to paragraph 5 and taking into account the revised proposed forest reference level submitted under paragraph 5a, adopt [...] implementing acts laying down the [...] forest reference levels to be applied by the Member States for the period from 2021 to 2025 and for the period from 2026 to 2030. [...]

7. [...] If a Member State does not submit its [...] forest reference level to the Commission by the dates specified in paragraph 3 and, where applicable, paragraph 5a, the Commission shall [...] adopt implementing acts laying down the [...] forest reference level to be applied by that Member State for the period from 2021 to 2025 and for the period from 2026 to 2030, in light of any technical assessment carried out pursuant to paragraph 5.
- 7a. The implementing acts referred to in paragraph 6 and 7 of this Article shall be adopted in accordance with the examination procedure referred to in Article 14a [...] by 31 December 2020 for the period from 2021 to 2025 and by 30 June 2025 for the period from 2026 to 2030.
- 7b. In order to ensure consistency as referred to in the second subparagraph of paragraph 4 of this Article Member States shall, where necessary, submit to the Commission technical corrections not requiring amendments to the implementing acts adopted pursuant to the previous paragraphs at the latest by the dates referred to in Article 12 (1).

#### *Article 9*

#### **Accounting for harvested wood products**

1. In accounts pursuant to Article 6(1) and 8(1) relating to harvested wood products, Member States shall reflect emissions and removals resulting from changes in the pool of harvested wood products falling within the following categories using the first order decay function, the methodologies and the default half-life values specified in Annex V:
- (a) paper;
  - (b) wood panels;
  - (c) sawn wood.

2. Member States may supplement these categories with information on other wood based material products, including bark, provided that the available data is transparent and verifiable.

[...]

## *Article 10*

### **Accounting for natural disturbances**

1. [...] For the periods from 2021 to 2025 and from 2026 to 2030, Member States may exclude from their accounts for afforested land and managed forest land greenhouse gas emissions resulting from natural disturbances exceeding the average emissions caused by natural disturbances in the period from [...] 1997-2016, excluding statistical outliers ('background level') calculated in accordance with this Article and Annex VI.
2. Where a Member State applies paragraph 1, it shall:
  - a) submit to the Commission information on the background level for each land accounting category determined in paragraph 1 and on the data and methodologies used in accordance with Annex VI, and
  - b) [...] exclude from accounting until 2030 all subsequent removals on the land affected by natural disturbances.
3. The Commission [...] is empowered to adopt delegated acts in accordance with Article 14 to amend Annex VI in order to revise the methodology and information requirements in that Annex [...] to reflect changes in the IPCC Guidelines as adopted by the Conference of the Parties to the UNFCCC or the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement.

## Article 10a

### Flexibilities

1. A Member State may use:
  - (a) the general flexibilities set out in Article 11; and
  - (b) the managed forest land flexibility set out in Article 11a in order to comply with the commitment in Article 4.
2. If a Member State is not in compliance with the monitoring requirements laid down in point (da) of Article 7(1) [...] of Regulation (EU) No 525/2013, the Central Administrator designated under Article 20 of Directive 2003/87/EC ("the Central Administrator") shall temporarily prohibit that Member State from transferring or banking pursuant to Article 11 (2) and 11 (3) or use the flexibility pursuant to Article 11a<sup>18</sup>.

## *Article 11*

### General flexibilities

1. Where total emissions exceed removals in a Member State, and that Member State has chosen to use its flexibility and has requested to delete annual emission allocations under Regulation [ESR], this quantity shall be taken into account for the Member State's compliance with its commitment pursuant to Article 4 of this Regulation.
2. To the extent that total removals exceed emissions in a Member State and after subtraction of any quantity taken into account under Article 7 of Regulation [ESR], that Member State may transfer the remaining quantity to another Member State. The transferred quantity shall be taken into account when assessing the receiving Member State's compliance with its commitment pursuant to Article 4 of this Regulation.
3. To the extent that total removals exceed emissions in a Member State in the period from 2021 to 2025, and after subtraction of any quantity taken into account under Article 7 of Regulation [ESR] [...] or transferred to another Member State pursuant to paragraph 2 of this Article, that Member State may bank the remaining quantity to the period from 2026 to 2030.

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<sup>18</sup> Paragraph moved from Article 11 (5).

4. In order to avoid double counting, the quantity of net removals taken into account under Article 7 of Regulation [ESR] [...] shall be subtracted from that Member State's quantity available for transfer to another Member State or banking pursuant to paragraphs 2 and 3 of this Article.
5. [...]

*Article 11a*

Managed forest land flexibility

1. Where total emissions exceed removals in the land accounting categories referred to in Article 2 accounted in accordance with this Regulation in a Member State, that Member State may use the managed forest land flexibility in order to comply with Article 4.
2. Where the result of the calculation referred to in Article 8(1) is positive, the Member State concerned is entitled to compensate these emissions provided that:
  - a) the Member State in its Long-term low emission strategy submitted in accordance with [Article 14] of Regulation [ EU xxxx<sup>19</sup>] has included ongoing or envisaged concrete measures to ensure the conservation or enhancement, as appropriate, of sinks and reservoirs from forests at the latest by 2050, and
  - b) within the Union total emissions do not exceed removals in the land accounting categories referred to in Article 2 for the period for which the Member State intends to use the compensation. When assessing whether within the Union total emissions exceed removals, the Commission shall ensure that double counting is avoided.

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<sup>19</sup> Insert reference to Regulation of the European Parliament and of the Council [on the Governance of the Energy Union and Climate Action].

3. [...] The following shall apply for the amount of compensation:
  - a) The Member State concerned may only compensate for sink accounted as emissions against their Forest Reference Level; and
  - b) only up to the maximum amount of compensation for that Member State set out in Annex VII for the period from 2021 to 2030. [...]

#### *Article 12*

#### **Compliance check**

1. [...] By 15 March 2027 and by 15 March 2032, Member States shall submit to the Commission a compliance report containing the following:
  - (a) the balance of total [...] emissions and removals [...] for the period from 2021 to 2025 [...] and from 2026 to 2030, respectively, on each of the land accounting categories specified in Article 2, using the accounting rules laid down in this Regulation; and
  - (b) where applicable, details on the intention to use the flexibilities and related amounts.
2. The Commission shall carry out a comprehensive review of the compliance reports for the purpose of assessing compliance with Article 4.
- 2a. The Commission shall report in 2027, for the period from 2021 to 2025, and in 2032, for the period 2026 to 2030, on the Union's total emissions and removals of greenhouse gases for each of the land accounting categories referred to in Article 2 calculated as the total reported emissions and removals for the period minus the value obtained by multiplying by five the Union's average annual reported emissions and removals in the period 2000 to 2009.
3. The European Environment Agency shall assist the Commission in the implementation of the monitoring and compliance framework under this Article, in accordance with its annual work programme.

### *Article 13*

#### **Registry**

1. The Commission shall [...] adopt delegated acts in accordance with Article 14 of this Regulation to supplement this Regulation in order to record the quantity of emissions and removals for each land accounting category in each Member State and ensure the accurate accounting in the exercise of the flexibilities pursuant to Article 11 and 11a of this Regulation through the Union Registry established pursuant to Article 10 of Regulation (EU) No 525/2013.
- 1a. The Central Administrator shall conduct an automated check on each transaction under this Regulation and, where necessary, block transactions to ensure that there are no irregularities.  
[...]
2. [...] The information referred to in paragraphs 1 and 1a shall be accessible to the public.

### *Article 14*

#### **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 3(2), 5(6), [...] 10(3) and 13(1) shall be conferred on the Commission for a period of 5 years from [date of entry into force of this Regulation]. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the 5-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.  
[...]

3. The delegation of powers referred to in [...] Articles 3(2), 5(6), [...] 10(3) and 13(1) 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 the adoption of 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 [...].
5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
6. A delegated act adopted pursuant to [...] Articles 3(2), 5(6), [...] 10(3) and 13(1) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of notification of that act to the European Parliament and 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 two months at the initiative of the European Parliament or of the Council.

#### Article 14a

##### Committee procedure

1. The Commission shall be assisted by the Climate Change Committee established by Regulation (EU) 525/2013. That Committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.

3. Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third subparagraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

#### *Article 15*

##### **Review**

1. The provisions of this Regulation shall be kept under review [...] taking into account inter alia evolving national circumstances, international developments and efforts undertaken to achieve the long-term objectives of the Paris Agreement.
2. The Commission shall report to the European Parliament and to the Council [...] within six months following each global stocktake agreed under Article 14 of the Paris Agreement on the operation of this Regulation, its contribution to the Union's [...] overall 2030 greenhouse gas emission reduction target and its contribution to the goals of the Paris Agreement, in particular with regard to the need for additional Union policies and measures in view of necessary greenhouse gas reductions by the Union and its Member States, and may make proposals if appropriate.

#### *Article 16*

##### **Amendments to Regulation (EU) No 525/2013**

Regulation (EU) No 525/2013 [...] is hereby amended as follows:

- (1) Article 7(1) is amended as follows:

- (a) the following point [...] is inserted:

"(da) [...] as of 2023, their emissions and removals covered by Article 2 of Regulation [LULUCF] [...] in accordance with the methodologies specified in Annex IIIa to this Regulation;

(b) the following subparagraph is added:

"A Member State may request derogation from point (da) of the first subparagraph to apply a different methodology than specified in Annex IIIa if the methodology improvement required could not be achieved in time for the improvement to be taken into account in the greenhouse gas inventories of the period from 2021 to 2030, or the cost of the methodology improvement would be disproportionately high compared to the benefits of applying such methodology to improve accounting for emissions and removals due to the low significance of the emissions and removals from the carbon pools concerned. Member States wishing to benefit from the derogation shall submit a reasoned request to the Commission by 31 December 2020, indicating the timeline by when the methodology improvement could be implemented and/or the alternative methodology proposed, and an assessment of the potential impacts on the accuracy of accounting. The Commission may request additional information to be submitted within a reasonable time period specified. Where the Commission considers that the request is justified, it shall grant the derogation. If the request is rejected, the Commission shall give reasons for its decision."

(2) In Article 13(1)(c), the following point [...] is added:

"(ix) as [...] of 2023, information on national policies and measures implemented towards meeting their obligations under Regulation [LULUCF] and information on planned additional national policies and measures envisaged with a view to limiting greenhouse gas emissions or enhancing sinks beyond their commitments under that Regulation;"

(3) In Article 14(1), the following point is inserted:

"(bb) as [...] of 2023, total greenhouse gas projections and separate estimates for the projected greenhouse gas emissions and removals covered by Regulation [LULUCF]",

(4) The following Annex IIIa is inserted:

"Annex IIIa

Methodologies for monitoring and reporting referred to in point (da) of Article 7 (1)

Approach 3: Geographically-explicit land-use conversion data in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

Tier 1 methodology [...] in accordance with the 2006 IPCC guidelines for National Greenhouse Gas Inventories.

For emissions and removals for a carbon pool that accounts for at least 25-30% of emissions or removals in a source or sink category which is prioritised within a Member State's national inventory system because its estimate has a significant influence on a country's total inventory of greenhouse gases in terms of the absolute level of emissions and removals, the trend in emissions and removals, or the uncertainty in emissions and removals in the land-use categories, at least Tier 2 methodology [...] in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

Member States are encouraged to apply Tier 3 methodology [...], in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. "

*Article 16a*

Amendment to Decision (EU) No 529/2013

In Decision No 529/2013/EU, the first subparagraph of Article 3(2) and Article 6(4) are deleted.

*Article 17*

**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*

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**Annex I: Greenhouse gases and carbon pools**

A. Greenhouse gases pursuant to Article 2:

- (a) carbon dioxide (CO<sub>2</sub>);
- (b) methane (CH<sub>4</sub>);
- (c) nitrous oxide (N<sub>2</sub>O)

expressed in terms of tonnes of CO<sub>2</sub> equivalent determined pursuant to Regulation (EU) No 525/2013.

B. Carbon pools pursuant to Article 5(4):

- (a) above-ground biomass;
- (b) below-ground biomass;
- (c) litter;
- (d) dead wood;
- (e) soil organic carbon;
- (f) for afforested land and managed forest land: harvested wood products.

**Annex II: Minimum values for area size, tree crown cover and tree height [...]**

<b>Minimum values for area size, tree crown cover and tree height</b>			
<b>Member State</b>	<b>Area (ha)</b>	<b>Tree crown cover (%)</b>	<b>Tree height (m)</b>
Belgium	0,5	20	5
Bulgaria	0,1	10	5
Croatia	0,1	10	2
Czech Republic	0,05	30	2
Denmark	0,5	10	5
Germany	0,1	10	5
Estonia	0,5	30	2
Ireland	0,1	20	5
Greece	0,3	25	2
Spain	1,0	20	3
France	0,5	10	5
Italy	0,5	10	5
Cyprus	<u>0,3</u>	<u>10</u>	<u>5</u>
Latvia	0,1	20	5
Lithuania	0,1	30	5
Luxembourg	0,5	10	5
Hungary	0,5	30	5
Malta	<u>1,0</u>	<u>30</u>	<u>5</u>
Netherlands	0,5	20	5
Austria	0,05	30	2
Poland	0,1	10	2

Portugal	1,0	10	5
Romania	0,25	10	5
Slovenia	0,25	30	2
Slovakia	0,3	20	5
Finland	0,5	10	5
Sweden	0,5	10	5
United Kingdom	0,1	20	2

[...]

**Annex III: Base years for the purposes of calculating  
the cap pursuant to Article 8(2)<sup>20</sup>**

<b>Member State</b>	<b>Base Year</b>
Belgium	1990
Bulgaria	1988
Croatia	1990
Czech Republic	1990
Denmark	1990
Germany	1990
Estonia	1990
Ireland	1990
Greece	1990
Spain	1990
France	1990
Italy	1990
Cyprus	<u>1990</u>
Latvia	1990
Lithuania	1990
Luxembourg	1990
Hungary	1985-87
Malta	<u>1990</u>
Netherlands	1990
Austria	1990
Poland	1988

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<sup>20</sup> Deletion of Annex III predicated upon the selected alternative of a cap based on forest area as set out in Article 8(2).

Portugal	1990
Romania	1989
Slovenia	1986
Slovakia	1990
Finland	1990
Sweden	1990
United Kingdom	1990

[...]

**Annex IV: National forestry accounting report [...] containing a Member State's updated forest reference level**

A. Criteria and guidance for determining forest reference levels

Member State forest reference levels shall be determined in accordance with the following criteria:

- (a) Reference levels shall be consistent with the goal of achieving a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, including enhancing the potential removals by aging forest stocks, which may otherwise show progressively declining sink;
- (b) Reference levels shall ensure that the mere presence of carbon stocks is excluded from accounting;
- (c) Reference levels should ensure a robust and credible accounting, to guarantee that emissions and removals resulting from biomass use are properly accounted for;
- (d) Reference levels shall include the carbon pool of harvested wood products, providing a comparison between assuming instantaneous oxidation and applying the first-order decay function and half-life values;
- (e) Reference levels should [...] be consistent with the objective of contributing to the conservation of biodiversity and the sustainable use of natural resources, as set out in the EU Forest Strategy, Member States' national forest policies, and the EU Biodiversity Strategy;
- (ea) **Reference levels should take into account, where applicable, the occupation of territory, war time and post war circumstances impacting forest management during the reference period;**

- (f) Reference levels shall be consistent with the national projections of anthropogenic greenhouse gas emissions by sources and removals by sinks reported under Regulation (EU) No 525/2013;
- (g) Reference levels shall be consistent with greenhouse gas inventories and relevant historical data and shall be based on transparent, complete, consistent, comparable and accurate information. In particular, the model used to construct the reference level shall be able to reproduce historical data from the national greenhouse gas inventory.

[...]

[...] B. Elements of the national forestry accounting [...] report

The national forestry accounting [...] report submitted pursuant to Article 8 of this Regulation shall contain the following elements:

- (a) A general description of the construction of the reference level and a description on how the criteria in this Regulation were taken into account;
- (b) Identification of the carbon pools and greenhouse gases which have been included in the reference level, reasons for omitting a carbon pool from the reference level construction, and demonstration of the consistency between the pools included in the reference level;
- (c) A description of approaches, methods and models, including quantitative information, used in the construction of the reference level, consistent with the most recently submitted national inventory report and documentary information on sustainable forest management practices and intensity and adopted national policies;

[...]

- (d) Information on how harvesting rates are expected to develop under different policy scenarios;

- (e) A description of how each of the following elements were considered in the construction of the reference level:
- (1) Area under forest management;
  - (2) Emissions and removals from forests and harvested wood products as shown in greenhouse gas inventories and relevant historical data,
  - (3) Forest characteristics, including [...] dynamic age related forests characteristics, increments, rotation length and other information on forest management activities under ‘business as usual’;
  - (4) Historical and future harvesting rates disaggregated between energy and non-energy uses.

### **Annex V: First order decay function and default half-life values for harvested wood products**

#### Methodological issues

- If it is not possible to differentiate between harvested wood products on afforested land and on managed forest land, a Member State may choose to account for harvested wood products assuming that all emissions and removals occurred on managed forest land.
- Harvested wood products in solid waste disposal sites and harvested wood products that were harvested for energy purposes shall be accounted for on the basis of instantaneous oxidation.
- Imported harvested wood products, irrespective of their origin, are not accounted for by the importing Member State ("production approach").
- For exported harvested wood products, country-specific data refers to country-specific half-life values and harvested wood products usage in the importing country.
- Country-specific half-life values for harvested wood products placed on the market in the Union should not deviate from those used by the importing Member State.
- Member States may, for information purposes only, provide in their submission data on the share of wood used for energy purposes that was imported from outside the Union, and the countries of origin for such wood.

Member States may use country-specific methodologies and half-life values instead of the methodologies and default half-life values specified in this Annex, provided that those methodologies and values are determined on the basis of transparent and verifiable data and that the methods used are at least as detailed and accurate as those specified in this Annex.

First order decay function as described in latest IPCC Guidance, starting with  $i = 1900$  and continuing to present year.

[...]

Default half-life values:

Half-life value means the number of years it takes for the quantity of carbon stored in a harvested wood products category to decrease to one half of its initial value. Default half-life values (HL):

- (a) 2 years for paper
- (b) 25 years for wood panels
- (c) 35 years for sawn wood.

Member States may supplement those categories with information on bark, provided that the available data is transparent and verifiable. Member States may also use country-specific sub-categories of any of those categories.

#### **Annex VI: Calculation of background levels for natural disturbances**

1. For the calculation of the background level, the following information shall be provided:
  - (a) historic levels of emissions caused by natural disturbances;
  - (b) the type(s) of natural disturbance included in the estimation;
  - (c) total annual emissions estimations for those natural disturbance types for the period 2001-2020, listed by land accounting categories;
  - (d) demonstration of the time series consistency in all relevant parameters, including minimum area, emission estimation methodologies, coverages of pools and gases.

2. The background level is calculated as the average of the 1997-2016 time series excluding all years where abnormal levels of emissions were recorded, i.e. excluding all statistical outliers. The identification of statistical outliers shall happen as follows:

- (a) calculate the arithmetic average value and the standard deviation of the full time series 1997-2016;
- (b) exclude from the time series all years where the annual emissions are outside twice the standard deviation around the average;
- (c) calculate again the arithmetic average value and the standard deviation of the time series 1997-2016 minus the years excluded in (b);
- (d) repeat (b) and (c) until no outliers can be identified.

3. After calculating the background level pursuant to point 2 of this Annex, if emissions in a particular year in the periods from 2021 to 2025 and from 2026 to 2030 exceed the background level plus a margin, the amount of emissions exceeding the background level may be excluded in accordance with Article 10. The margin shall be equal to a probability level of 95%.

4. The following emissions cannot be excluded:

- (a) emissions resulting from harvesting and salvage logging activities that took place on those lands following the occurrence of the natural disturbances;
- (b) emissions resulting from prescribed burning that took place on those lands in that particular year of the period from 2021 to 2025 or from 2026 to 2030;
- (c) emissions on lands that were subject to deforestation following the occurrence of natural disturbances.

5. Information requirements pursuant to Article 10(2) include the following:

- (a) identification of all land areas affected by natural disturbances in that particular year, including their geographical location, the period and types of natural disturbances;
- (b) evidence that no deforestation has occurred during the rest of the period from 2021 to 2025 or from 2026 to 2030 on lands that were affected by natural disturbances and in respect of which emissions were excluded from accounting;

- (c) description of verifiable methods and criteria to be used to identify deforestation on those lands in the subsequent years of the period from 2021 to 2025 or from 2026 to 2030;
- (d) where feasible, description of measures the Member State undertook to prevent or limit the impact of those natural disturbances;
- (e) where feasible, description of measures the Member State undertook to rehabilitate the lands affected by those natural disturbances.

**Annex VII: Maximum amount of compensation available under the managed forest land flexibility referred to in Article 11a(3)(a)**

Member State	Reported average forest sink 2000-2009 in million tonnes CO2 equivalent per year	Compensation limit expressed in million tonnes of CO2 equivalent for the period 2021-2030
Austria	-5,34	-17,1
Belgium	-3,61	-2,2
Bulgaria	-9,31	-5,6
Czech Republic	-5,14	-3,1
Cyprus	-0,15	-0,03
Germany	-45,94	-27,6
Denmark	-0,56	-0,1
Estonia	-3,07	-9,8
Greece	-1,75	-1,0
Spain	-26,51	-15,9
Finland	-36,79	-44,1
France	-51,23	-61,5
Croatia	-8,04	-9,6
Hungary	-1,58	-0,9
Ireland	-0,85	-0,2
Italy	-24,17	-14,5
Lithuania	-5,71	-3,4
Luxembourg	-0,49	-0,3
Latvia	-8,01	-25,6
Malta	0,00	0,0
Netherlands	-1,72	-0,3
Poland	-37,50	-22,5
Portugal	-5,13	-6,2
Romania	-22,34	-13,4
Sweden	-39,55	-47,5
Slovakia	-5,42	-6,5
Slovenia	-5,38	-17,2
United Kingdom	-16,37	-3,3