

Liitteet

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Liite 1. Muutosehdotukset LULUCF-asetukseen

Punaisella värillä merkityt osiot ovat kirjoittajien korostamia kohtia

Regulation (EU) 2018/841	Muutosehdotus	Kommentit
<p><i>Article 1</i></p> <p>Subject matter</p> <p>This Regulation sets out the commitments of Member States for the land use, land use change and forestry ('LULUCF') sector that contribute to achieving the objectives of the Paris Agreement and meeting the greenhouse gas emission reduction target of the Union for the period from 2021 to 2030. This Regulation also lays down the rules for the accounting of emissions and removals from LULUCF and for checking the compliance of Member States with those commitments.</p>	<p>Article 1 is replaced by the following:</p> <p><i>Article 1</i></p> <p>Subject matter</p> <p>This Regulation sets out rules concerning:</p> <p>(a) commitments of Member States for the land use, land use change and forestry sector that contribute to achieving the objectives of the Paris Agreement and meeting the greenhouse gas emission reduction target of the Union for the period from 2021 to 2025;</p> <p>(b) accounting of greenhouse gas emissions and removals from the land use, land use change and forestry sector and for checking the compliance of Member States with the commitments referred to in point (a) for the period from 2021 to 2025;</p> <p>(c) a Union target for net greenhouse gas removals in the land use, land use change and forestry sector for the period from 2026 to 2030;</p> <p>(d) targets for net greenhouse gas removals in the land use, land use change and forestry sector for Member States for the period from 2026 to 2030;</p> <p>(e) commitments of Member States to take the necessary measures aiming towards the collective achievement of climate-neutrality in the Union by 2035 in the land use, land use change and forestry sector including emissions by the non-CO2 agriculture.</p>	<ul style="list-style-type: none"> • Nykyisten sääntöjen soveltamisaika muutetaan vuosiksi 2021–2025. • Uudet kohdat: <ul style="list-style-type: none"> ○ Asetuksen tarkoitus on vahvistaa EU:n ja jäsenmaiden LULUCF-sektorin tavoitetta kaudelle 2026–2030. ○ Tavoitteena on ilmastoneutraalisuus unionissa vuoteen 2035 mennessä LULUCF- ja maataloussektoreista yhdistetyllä maankäyttösektorilla.
<p><i>Article 2</i></p> <p>Scope</p> <p>1. This Regulation applies to emissions and removals of the greenhouse gases listed in Section A of Annex I thereto, reported pursuant to Article 7 of Regulation (EU) No 525/2013 and that occur in any of the following land accounting categories on the territories of</p>	<p>Article 2 is replaced by the following:</p> <p><i>Article 2</i></p> <p>Scope</p> <p>1. This Regulation applies to emissions and removals of the greenhouse gases listed in Section A of Annex I, reported pursuant to Article 26(4) of Regulation (EU) 2018/1999 of the European Parliament and of the Council</p>	<ul style="list-style-type: none"> • Alkuperäinen soveltamisala koskee vain kautta 2021–2025. • Hoidetut kosteikot sisältyvät vuosien 2021–2025 soveltamisalaan vain niiden jäsenvaltioiden osalta, jotka ovat ilmoittaneet aikovansa sisällyttää sen laskentaan 31. joulukuuta 2020 mennessä. • Vuodesta 2026 lähtien asetusta sovelletaan kasvi-

<p>Member States:</p> <p>(a) During the periods from 2021 to 2025 and from 2026 to 2030:</p> <p>(i) 'afforested land': land use reported as cropland, grassland, wetlands, settlements or other land, converted to forest land;</p> <p>(ii) 'deforested land': land use reported as forest land converted to cropland, grassland, wetlands, settlements or other land;</p> <p>(iii) 'managed cropland': land use reported as:</p> <ul style="list-style-type: none"> — cropland remaining cropland, — grassland, wetland, settlement or other land, converted to cropland, or — cropland converted to wetland, settlement or other land; <p>(iv) 'managed grassland': land use reported as:</p> <ul style="list-style-type: none"> — grassland remaining grassland, — cropland, wetland, settlement or other land, converted to grassland, or — grassland converted to wetland, settlement or other land; <p>(v) 'managed forest land': land use reported as forest land remaining forest land.</p> <p>(b) As of 2026: 'managed wetland': land use reported as:</p> <ul style="list-style-type: none"> — wetland remaining wetland, — settlement or other land, converted to wetland, or — wetland converted to settlement or other land. <p>2. During the period from 2021 to 2025, a Member State may include in the scope of its commitment pursuant to Article 4 of this Regulation emissions and removals of the greenhouse gases listed in Section A of Annex I to this Regulation, reported pursuant to Article</p>	<p>ci)⁴³ and occurring on the territories of Member States in the period from 2021 to 2025 in any of the following land accounting categories:</p> <p>(a) land use reported as cropland, grassland, wetlands, settlements or other land, converted to forest land ('afforested land');</p> <p>(b) land use reported as forest land converted to cropland, grassland, wetlands, settlements or other land ('deforested land');</p> <p>(c) land use reported as either of the following ('managed cropland'):</p> <ul style="list-style-type: none"> (i) cropland remaining cropland; (ii) grassland, wetland, settlement or other land, converted to cropland; (iii) cropland converted to wetland, settlement or other land; <p>(d) land use reported as either of the following ('managed grassland'):</p> <ul style="list-style-type: none"> (i) grassland remaining grassland; (ii) cropland, wetland, settlement or other land, converted to grassland; (iii) grassland converted to wetland, settlement or other land; <p>(e) land use reported as forest land remaining forest land ('managed forest land');</p> <p>(f) where a Member State has notified to the Commission its intention to include such land use in the scope of its commitments pursuant to Article 4(1) by 31 December 2020, land use reported as either of the following ('managed wetland'):</p> <ul style="list-style-type: none"> — wetland remaining wetland; — settlement or other land, converted to wetland; — wetland converted to settlement or other land. <p>2. This Regulation also applies to emissions and removals of the greenhouse gases listed in Section A of Annex I, reported pursuant to Article 26(4) of Regulation (EU) 2018/1999 and occurring on the territories of Member</p>	<p>huonekaasuinventaarion raportointiluokkien päästöihin ja poistumiin.</p> <ul style="list-style-type: none"> • Vuodesta 2031 alkaen asetuksen soveltamisalaan sisällytetään maataloussektori.
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<p>7 of Regulation (EU) No 525/2013, and that occur in the land accounting category of managed wetland on its territory. This Regulation also applies to such emissions and removals included by a Member State.</p> <p>3. Where a Member State intends, pursuant to paragraph 2, to include managed wetland in the scope of its commitment, it shall notify the Commission thereof by 31 December 2020.</p> <p>4. If necessary in light of experience gained with the application of the IPCC Refinement to the IPCC Guidelines, the Commission may make a proposal to postpone the mandatory accounting for managed wetland for an additional period of five years.</p>	<p>States in the period from 2026 to 2030, in any of the following land reporting categories and/or sectors:</p> <p>(a) forest land; (b) cropland; (c) grassland; (d) wetlands; (e) settlements; (f) other land; (g) harvested wood products; (h) other; (i) atmospheric deposition; (j) nitrogen leaching and run-off.</p> <p>3. This Regulation also applies to emissions and removals of the greenhouse gases listed in Section A of Annex I, reported pursuant to Article 26(4) of Regulation (EU) 2018/1999 and occurring on the territories of Member States from 2031 and onwards, in any of the land categories listed in paragraph 2, points (a) to (j) and in any of the following sectors:</p> <p>(a) enteric fermentation; (b) manure management; (c) rice cultivation; (d) agricultural soils; (e) prescribed burning of savannas; (f) field burning of agricultural residues; (g) liming; (h) urea application; (i) 'other carbon-containing fertilizers'; (j) 'other'.</p>	<ul style="list-style-type: none"> • Asetusehdotuksessa inventaarion päästöluokkia kutsutaan sektoreiksi. 'and/or sectors' vaikuttaa tarpeettomalta. Sektorin tilalle sopii paremmin raportointiluokka.
<p><i>Article 3</i></p> <p>Definitions</p> <p>(7) 'forest reference level' means an estimate, expressed in tonnes of CO₂ equivalent per year, of the average annual net emissions or removals resulting from managed forest land within the territory of a Member State in the periods from 2021 to 2025 and from 2026 to 2030, based on the criteria set out in this Regulation;</p>	<p>Ei muutoksia</p>	<ul style="list-style-type: none"> • Para 7: forest reference level <ul style="list-style-type: none"> ○ Poistettava kausi 2026–2030 • Para 9: natural disturbances <ul style="list-style-type: none"> ○ Joko määritelmä koskee vain vuosia 2021–2025 tai koskee ehdotuksessa kaikkia maankäyttöluokkia, art. 13b LFM perustelut: <i>The mechanism would then deal with any unexpected decrease in</i>

<p>(9) 'natural disturbances' mean any non-anthropogenic events or circumstances that cause significant emissions in forests and the occurrence of which is beyond the control of the relevant Member State, and the effects of which the Member State is objectively unable to significantly limit, even after their occurrence, on emissions;</p>		<p><i>net removals on all land categories, not only forest, due to pest, fire, and storms, on condition of clear evidence to be submitted by the Member States in accordance with existing criteria (Annex VI) (Calculation of background levels for natural disturbances)</i></p> <ul style="list-style-type: none"> ○ Johdannossa: (12) Discontinuing the current accounting rules after 2025 creates a need for alternative provisions for natural disturbances such as fire, pest, and storms, in order to address uncertainties due to natural processes or as a result of climate change in the land use, land use change and forestry sector. A flexibility mechanism linked to natural disturbances should be available to Member States in 2032, provided that they have exhausted all other flexibilities at their disposal, put in place appropriate measures to reduce the vulnerability of their land to such disturbances and that the achievement by the Union of the 2030 target for the land use, land use change and forestry sector is completed.
<p><i>Article 4</i></p> <p>Commitments</p> <p>For the periods from 2021 to 2025 and from 2026 to 2030, taking into account the flexibilities provided for in Articles 12 and 13, each Member State shall ensure that emissions do not exceed removals, calculated as the sum of total emissions and total removals on its territory in all of the land accounting categories referred to in Article 2 combined, as accounted in accordance with this Regulation.</p>	<p>Article 4 is replaced by the following:</p> <p><i>Article 4</i></p> <p>Commitments and targets</p> <p>1. For the period from 2021 to 2025, taking into account the flexibilities provided for in Articles 12, 13 and 13a, each Member State shall ensure that greenhouse gas emissions do not exceed greenhouse gas removals, calculated as the sum of total emissions and total removals on its territory in all of the land accounting categories referred to in Article 2(1).</p> <p>2. The 2030 Union target for net greenhouse gas removals is 310 million tonnes CO₂ equivalent as a sum of the Member States targets established in accordance with paragraph 3 of this Article, and shall be based on the average of its greenhouse gas inventory data for the years</p>	<ul style="list-style-type: none"> • Para 1: Ehdotuksesta on jätetty pois '...as accounted in accordance with this Regulation.', joka on keskeinen lause siitä miten velvoite lasketaan. Ehdotuksessa viitataan vain tililuokkiin mutta ei niiden laskentasääntöihin. Artiklassa 13 on lisätty hakasulkuihin. Voisi olla tässäkin selvyuden vuoksi. <p>Jaottelu kolmeen jaksoon:</p> <p>1. Velvoitteet vuosina 2021–2025:</p> <ul style="list-style-type: none"> • Nykyisten sääntöjen mukaan jäsenvaltioiden on varmistettava, että laskentasääntöjen jälkeen tilinpilokkien yhteenlasketut päästöt eivät ylitä poistumia, ottaen huomioon joustot.

<p>2016, 2017 and 2018.</p> <p>Each Member State shall ensure that, taking into account the flexibilities provided for in Articles 12 and 13 and 13b, the annual sum of its greenhouse gas emissions and removals on its territory and in all of the land reporting categories referred to in Article 2(2), points (a) to (j), in each year in the period from 2026 to 2030 does not exceed the limit established by a linear trajectory, ending in 2030 on the target set out for that Member State in Annex IIa. The linear trajectory of a Member State shall start in 2022.</p> <p>3. The Commission shall adopt implementing acts setting out the annual targets based on the linear trajectory for net greenhouse gas removals for each Member State, for each year in the period from 2026 to 2029 in terms of tonnes CO₂ equivalent. These national trajectories shall be based on the average greenhouse gas inventory data for the years 2021, 2022 and 2023, reported by each Member State. The value of the 310 million tonnes CO₂ equivalent net removals as a sum of the targets for Member States set out in Annex IIa may be subject to a technical correction due to a change of methodology by Member States. The method for determination of the technical correction to be added to the targets of the Member States, shall be set out in these implementing acts. For the purpose of those implementing acts, the Commission shall carry out a comprehensive review of the most recent national inventory data for the years 2021, 2022 and 2023 submitted by Member States pursuant to Article 26(4) of Regulation (EU) 2018/1999.</p> <p>Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 16a.</p> <p>4. The Union-wide greenhouse gas emissions in the sectors set out in Article 2(3), points (a) to (j), shall aim to be net zero by 2035 and the Union shall achieve negative emissions thereafter. The Union and the Member States shall take the necessary measures to enable the collective</p>	<p>2. Tavoitteet vuosille 2026–2030:</p> <ul style="list-style-type: none"> • Asetetaan vuosien 2016, 2017 ja 2018 kasvihuonekaasuinventaariotietojen perusteella unionin tavoite, joka on 310 miljoonaa hiilidioksidiekvivalenttonnia nettopoistumia vuoteen 2030 mennessä. Tämä jaetaan jäsenvaltioiden kesken. • Jäsenmaille määritellään lineaarinen kehityspolku vuodesta 2022 vuoteen 2030, jota ei saa ylittää, ottaen huomioon joustot. • Tavoitepolun määrittely perustuu tietoihin, jotka käyty läpi komission järjestämässä kattavassa kasvihuonekaasuinventaarion tarkastuksessa vuonna 2025, ja lähtötilanne vuonna 2022 tulee olemaan vuosien 2021, 2022 ja 2023 keskiarvo. Komissio antaa täytäntöönpanosäädöksiä, joissa vahvistetaan vuosittaiset lineaarisen kehityspolun perusteella kullekin vuodelle 2026–2029. Jäsenmaiden tekemien uudelleen laskentojen perusteella EU:n nettonielutavoitetta 2030 voidaan muuttaa teknisellä korjauksella. Vuonna 2025 tapahtuva inventaarion tarkastus edellyttää muutosta asetuksen (EU) 2018/1999 38 artiklaan. Kauden velvoitteenmukaisuus tarkastetaan vuonna 2032. <p>3. Sitoutuminen ilmastoneutraaliuteen vuonna 2035</p> <ul style="list-style-type: none"> • Vuoden 2030 tavoite (ja tilanne) on lähtökohta AFOLU-sektorin kehityspolulle vuosina 2030–2050, jotta voidaan saavuttaa koko talouden kattava ilmastoneutraalius, ja sen avulla voidaan seurata edistymistä kohti kasvihuonekaasujen nollanettopäästöjä vuoteen 2050 mennessä. • EU:n kasvihuonekaasujen kokonaispäästöjen ja -poistumien tase maankäyttösektorilla (AFOLU)
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	<p>achievement of the target for 2035. The Commission shall, by 31 December 2025 and on the basis of integrated national energy and climate plans submitted by each Member State pursuant to Article 14 of Regulation (EU) 2018/1999 by 30 June 2024, make proposals for the contribution of each Member State to the net emissions reduction.</p>	<p>on oltava nolla vuonna 2035, ja negatiivinen sen jälkeen. Unionin ja jäsenvaltioiden on toteutettava tarvittavat toimenpiteet, jotta vuoden 2035 tavoite voidaan saavuttaa kollektiivisesti. Komissio tekee viimeistään 31 päivänä joulukuuta 2025 kunkin jäsenvaltion toimittamien yhdenmukaisesti kansallisten energia- ja ilmastosuunnitelmien perusteella ehdotuksia kunkin jäsenvaltion panoksista päästöjen vähentämisessä.</p>
<p><i>Article 5</i></p> <p>General accounting rules</p> <p>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 that their accounts and other data provided under this Regulation are accurate, complete, consistent, comparable and transparent. Member States shall denote emissions by a positive sign (+) and removals by a negative sign (-).</p> <p>2. Member States shall prevent any double counting of emissions or removals, in particular by ensuring that emissions and removals are not accounted for under more than one land accounting category.</p> <p>3. Where land use is converted, Member States shall, 20 years after the date of that conversion, change the categorisation of forest land, cropland, grassland, wetland, settlements and other land from such land converted to another type of land to such land remaining the same type of land.</p> <p>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</p>	<p>Ei muutoksia</p>	<ul style="list-style-type: none"> • Tässä artiklassa viitataan tilinpitoluokkiin, jotka koskevat ehdotuksessa enää vuosia 2021–2025. Artiklassa 2 käytetään 2 kohdassa 'land reporting categories' ja 3 kohdassa 'land categories'. Artikla 5 koskee oletettavasti kaikkia kausia, koska ei ehdoteta muutoksia, joten tulisi olla yhdenmukaiset nimitykset. • Para 3: 2006 IPCC-ohjeen mukaan turvetuotannoksi muuttuneen alan oletusmuutos aika on 5 vuotta. Muutos aika näissä tapauksissa tarkoittaa alueen valmistelua turvetuotantoon. Tämä lakiteksti pakottaa käyttämään näissäkin tapauksissa 20 vuoden muutos aikaa (paitsi jos muutos tapahtuikin kosteikkoluokan sisällä). Tämä on myös nykyisessä asetuksessa, mutta ehkä voisi saada tähän muutoksen, niin ettei näitä muutos aikoja määrättäisi lakitek-

<p>their accounts changes in carbon stocks of carbon pools provided that the carbon pool is not a source. However, that option not to include changes in carbon stocks in the accounts shall not apply in relation to the carbon pools of above-ground biomass, dead wood and harvested wood products, in the land accounting category of managed forest land.</p> <p>5. Member States shall maintain a complete and accurate record of all data used in preparing their accounts.</p> <p>6. The Commission is empowered to adopt delegated acts in accordance with Article 16 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.</p>		<p>teissä?</p> <ul style="list-style-type: none"> • Para 4: Ehdotuksen mukaan ei ole enää above-ground biomass carbon poolia (muutos liitteen I osaan B).
<p><i>Article 6</i></p> <p>Accounting for afforested land and deforested land</p> <p>1. Member States shall account for emissions and removals resulting from afforested land and deforested land, as being the total emissions and total removals for each of the years in the periods from 2021 to 2025 and from 2026 to 2030.</p> <p>2. By way of derogation from Article 5(3), where land use is converted from cropland, grassland, wetland, settlements or other land to forest land, a Member State may change the categorization of such land from land converted to forest land to forest land remaining forest land, 30 years after the date of that conversion, if duly justified based on the IPCC Guidelines.</p> <p>3. When calculating emissions and removals resulting from afforested land and deforested land, each Member State shall determine the forest area using the parameters specified in Annex II.</p>	<p>in Article 6, paragraphs 1 and 2 are replaced by the following:</p> <p>1. Member States shall account for emissions and removals resulting from afforested land and deforested land calculated as the total emissions and total removals for each of the years in the period from 2021 to 2025.</p> <p>2. By way of derogation from Article 5(3), and no later than 2025, where land use has been converted from cropland, grassland, wetland, settlements or other land to forest land, a Member State may, 30 years after the date of that conversion, change the categorization of such land from land converted to forest land to forest land remaining forest land, where such change is duly justified based on the IPCC Guidelines.</p>	<ul style="list-style-type: none"> • Kauden 2021–2025 tilinpitosäännöt säilyvät nykyisellään ja sääntöjä ei enää sovelleta kaudella 2026–2030. • Para 2: Epäselvää tarkoittaako, että muutos on tehtävä kauden 2021–2025 raportointiin eli 2027 inventaarioon mennessä vai onko muutos tehtävä vuoden 2025 inventaarion, jolloin kattava tarkastus tavoitepolun 2026–2029 asettamista varten. • Para 3: Joidenkin jäsenmaiden kannalta voisi olla hyödyllistä, jos voisivat muuttaa metsän määritelmää. Nyt pitäydytään edelleen KP 1. kaudelle valitussa määritelmässä. Onko tarpeen, jos maa haluaa muuttaa määritelmää, pystyy tuottamaan yhtenäisen aikasarjan ja on yhdenmukainen UNFCCC-raportoinnin kanssa?

Article 7

Accounting for managed cropland, managed grassland and managed wetland

1. Each Member State 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. Each Member State 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. During the period from 2021 to 2025, each Member State that, pursuant to Article 2(2), includes managed wetland in the scope of its commitments, ~~and all Member States during the period from 2026 to 2030,~~ shall account for emissions and removals resulting from managed wetland, calculated as emissions and removals in the respective periods 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.
4. During the period from 2021 to 2025, Member States that, pursuant to Article 2(2), have chosen not to include managed wetland in the scope of their commitments shall nevertheless report to the Commission on the emissions and removals from land use reported as:
 - (a) wetland remaining wetland;
 - (b) settlement or other land, converted to wetland; or€ wetland converted to settlement or other land.

in Article 7, paragraphs 1, 2 and 3 are replaced by the following:

1. Each Member State shall account for emissions and removals resulting from managed cropland calculated as emissions and removals in the period from 2021 to 2025 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. Each Member State shall account for emissions and removals resulting from managed grassland calculated as emissions and removals in the period from 2021 to 2025 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. During the period from 2021 to 2025, each Member State that includes managed wetland in the scope of its commitments shall account for emissions and removals resulting from managed wetland, calculated as emissions and removals in that period 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.

- Kauden 2021–2025 tilinpitösäännöt säilyvät nykyisellään ja sääntöjä ei enää sovelleta kaudella 2026–2030.

Article 8

Accounting for managed forest land

1. Each Member State 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 of this Article is negative in relation to a Member State's 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 pools of dead wood and harvested wood products, except the category of paper as referred to in point (a) of Article 9(1), in the land accounting category of managed forest land shall not be subject to this limitation.

3. Member States shall submit to the Commission their national forestry accounting plans, including a proposed forest reference level, by 31 December 2018 for the period from 2021 to 2025 ~~and by 30 June 2023 for the period from 2026 to 2030~~. The national forestry accounting plan shall contain all the elements listed in Section B of Annex IV and shall be made public, including via the internet.

4. Member States shall determine their forest reference level based on the criteria set out in Section A of Annex IV. For Croatia, its forest reference level may also take into account, in addition to the criteria set out in Section A of Annex IV, the occupation of its territory, and wartime and post-war circumstances that had an impact on forest management during the reference peri-

Article 8 is amended as follows:

(a) paragraph 1 is replaced by the following:

'1. Each Member State shall account for emissions and removals resulting from managed forest land, calculated as emissions and removals in the period from 2021 to 2025 minus the value obtained by multiplying by five the forest reference level of the Member State concerned.';

(b) in paragraph 3, the first sentence is replaced by the following:

'Member States shall submit to the Commission their national forestry accounting plans, including a proposed forest reference level, by 31 December 2018 for the period from 2021 to 2025.';

- Kauden 2021–2025 tilinpitosäännöt säilyvät nykyisellään ja niitä ei sovelleta kaudella 2026–2030.

<p>od.</p> <p>5. The forest reference level shall be based on the continuation of sustainable forest management practice, as documented in the period from 2000 to 2009 with regard to dynamic age-related forest characteristics in national forests, using the best available data.</p> <p>Forest reference levels as determined in accordance with the first subparagraph shall take account of the future impact of dynamic age-related forest characteristics in order not to unduly constrain forest management intensity as a core element of sustainable forest management practice, with the aim of maintaining or strengthening long-term carbon sinks.</p> <p>Member States shall demonstrate consistency between the methods and data used to determine the proposed forest reference level in the national forestry accounting plan and those used in the reporting for managed forest land.</p> <p>6. The Commission, in consultation with experts appointed by the Member States, shall undertake a technical assessment of the national forestry accounting plans 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 4 and 5 of this Article and in Article 5(1). In addition, the Commission shall consult stakeholders and civil society. 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.</p> <p>The Commission shall, where necessary, issue technical recommendations to the Member States reflecting the conclusions of the technical assessment to facilitate the technical revision of the proposed forest reference</p>	<p>(c) paragraphs 7, 8, 9 and 10 are replaced by the following:</p> <p>'7. Where necessary based on the technical assessments and on, where applicable, the technical recommendations, Member States shall communicate their revised proposed forest reference levels to the Commission by 31 December</p>	
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levels. The Commission shall publish those technical recommendations.

7. Where necessary based on the technical assessments and on, 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 to it by Member States.

8. Based on the proposed forest reference levels submitted by Member States, on the technical assessment carried out pursuant to paragraph 6 of this Article and, where applicable, on the revised proposed forest reference level submitted under paragraph 7 of this Article, the Commission shall adopt delegated acts in accordance with Article 16 amending Annex IV with a view to laying down the forest reference levels to be applied by the Member States for the periods from 2021 to 2025 ~~and from 2026 to 2030~~.

9. If a Member State does not submit its forest reference level to the Commission by the dates specified in paragraph 3 of this Article and, where applicable, paragraph 7 of this Article, the Commission shall adopt delegated acts in accordance with Article 16 amending Annex IV with a view to laying down the forest reference level to be applied by that Member State for the period from 2021 to 2025 ~~or from 2026 to 2030~~, based on any technical assessment carried out pursuant to paragraph 6 of this Article.

10. The delegated acts referred to in paragraphs 8 and 9 shall be adopted by 31 October 2020 for the period from 2021 to 2025 ~~and by 30 April 2025 for the period from 2026 to 2030~~.

11. In order to ensure consistency as referred to in paragraph 5 of this Article, Member States shall, where

2019 for the period from 2021 to 2025. The Commission shall publish the proposed forest reference levels communicated to it by Member States.

8. Based on the proposed forest reference levels submitted by Member States, on the technical assessment carried out pursuant to paragraph 6 of this Article and, where applicable, on the revised proposed forest reference level submitted under paragraph 7 of this Article, the Commission shall adopt delegated acts in accordance with Article 16 amending Annex IV with a view to laying down the forest reference levels to be applied by the Member States for the period from 2021 to 2025.

9. If a Member State does not submit its forest reference level to the Commission by the dates specified in paragraph 3 of this Article and, where applicable, paragraph 7 of this Article, the Commission shall adopt delegated acts in accordance with Article 16 amending Annex IV with a view to laying down the forest reference level to be applied by that Member State for the period from 2021 to 2025, based on any technical assessment carried out pursuant to paragraph 6 of this Article.

10. The delegated acts referred to in paragraphs 8 and 9 shall be adopted by 31 October 2020 for the period from 2021 to 2025.'

<p>necessary, submit to the Commission technical corrections not requiring amendments to the delegated acts adopted pursuant to paragraph 8 or 9 of this Article by the dates referred to in Article 14(1).</p>		
<p><i>Article 9</i> Accounting for harvested wood products</p> <p>1. In the accounts provided pursuant to Articles 6(1) and 8(1) relating to harvested wood products, Member States shall reflect emissions and removals resulting from changes in the carbon 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:</p> <p>(a) paper;</p> <p>(b) wood panels;</p> <p>(c) sawn wood.</p> <p>2. The Commission shall adopt delegated acts in accordance with Article 16 in order to amend paragraph 1 of this Article and Annex V by adding new categories of harvested wood products that have a carbon sequestration effect, based on 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, and ensuring environmental integrity.</p> <p>3. Member States may specify the wood-based material products, including bark, which fall within the existing and new categories referred to in paragraphs 1 and 2, respectively, based on 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, provided that the available data are transparent and verifiable.</p>	<p>Article 9 is amended as follows:</p> <p>(a) the title is replaced by the following: 'Carbon storage products';</p> <p>(b) paragraph 2 is replaced by the following: '2. The Commission shall adopt delegated acts in accordance with Article 16 in order to amend paragraph 1 of this Article and Annex V by adding new categories of carbon storage products, including harvested wood products, that have a carbon sequestration effect, based on 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, and ensuring environmental integrity.';</p>	<ul style="list-style-type: none"> • Nimi muutetaan nimeksi "Hiiltä varastoivat tuotteet". Sisältää myös puutuotteet. • Koskee myös kausia vuoden 2025 jälkeen. • Hiilivarastoiksi määritellään liitteessä I, osa B puutuotteet metsitetyn maan ja hoidetun metsämaan tilinpitoluokissa. Kaudella 2026–2030 näitä tilinpitoluokkia ei enää ole, joten liite on päivitettävä. • Para 2: Tarkemmin ei esitetä, millaisista tuotteista on kyse. Kun raportoitavien tuotteiden joukkoa laajennetaan, tulee se ja niiden laskentatavat olla ajoissa selvillä. Inventaarioita varten on kehitettävä uusille tuotteille laskentamenetelmiä ja tiedon keruuta.
<p><i>Article 10</i></p>	<p>Article 10 is amended as follows:</p> <p>(a) paragraph 1 is replaced by the following:</p>	<ul style="list-style-type: none"> • Kauden 2021–2025 tilinpitosäännöt säilyvät nykyisellään ja sääntöjä ei enää sovelleta kaudella 2026–

<p>Accounting for natural disturbances</p> <p>1. At the end of each of 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, that exceed the average emissions caused by natural disturbances in the period from 2001 to 2020, excluding statistical outliers ('background level'). That background level shall be calculated in accordance with this Article and Annex VI.</p> <p>2. Where a Member State applies paragraph 1, it shall:</p> <p>(a) submit to the Commission information on the background level for the land accounting categories referred to in paragraph 1 and on the data and methodologies used in accordance with Annex VI; and</p> <p>(b) exclude from accounting until 2030 all subsequent removals on the land affected by natural disturbances.</p> <p>3. The Commission is empowered to adopt delegated acts in accordance with Article 16 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.</p>	<p>'At the end of the period from 2021 to 2025, Member States may exclude from their accounts for afforested land and managed forest land greenhouse gas emissions, resulting from natural disturbances, that exceed the average emissions caused by natural disturbances in the period from 2001 to 2020, excluding statistical outliers ('background level'). That background level shall be calculated in accordance with this Article and Annex VI.';</p> <p>(b) in paragraph 2, point (b), '2030' is replaced by '2025':</p>	<p>2030.</p> <ul style="list-style-type: none"> • Luonnonhäiriöiden taustatason laskennan liite VI jää voimaan, ja sitä sovelletaan joustojen yhteydessä (artikla 13b).
<p><i>Article 11</i></p> <p>Flexibilities</p> <p>1. A Member State may use:</p> <p>(a) the general flexibilities set out in Article 12; and</p> <p>(b) in order to comply with the commitment in Article 4, the managed forest land flexibility set out in Article 13.</p> <p>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</p>	<p>Article 11 is amended as follows:</p> <p>(a) the title is replaced by the following: 'Flexibilities and governance';</p> <p>(b) paragraph 1 is replaced by the following: '1. A Member State may use:</p> <p>(a) the general flexibilities set out in Article 12; and</p> <p>(b) in order to comply with the commitment in Article 4, the managed forest land flexibility set out in Articles 13 and 13b.</p> <p>Finland may, besides the flexibilities referred to in the first subparagraph, points (a) and (b), use additional compensations pursuant to Article 13a.'</p>	<ul style="list-style-type: none"> • Artiklan nimi muutetaan nimeksi "joustomahdollisuudet ja hallinnointi".

<p>2003/87/EC ('the Central Administrator') shall temporarily prohibit that Member State from transferring or banking pursuant to Article 12(2) and (3) of this Regulation or using the managed forest land flexibility pursuant to Article 13 of this Regulation.</p>		
<p><i>Article 12</i></p> <p>General flexibilities</p> <p>1. Where total emissions exceed total 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 (EU) 2018/842, the quantity of deleted emission allocations shall be taken into account with respect to the Member State's compliance with its commitment pursuant to Article 4 of this Regulation.</p> <p>2. To the extent that total removals exceed total emissions in a Member State and after subtraction of any quantity taken into account under Article 7 of Regulation (EU) 2018/842, that Member State may transfer the remaining quantity of removals to another Member State. The quantity transferred shall be taken into account when assessing the recipient Member State's compliance with its commitment pursuant to Article 4 of this Regulation.</p> <p>3. To the extent that total removals exceed total 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 (EU) 2018/842 or transferred to another Member State pursuant to paragraph 2 of this Article, that Member State may bank the remaining quantity of removals to the period from 2026 to 2030.</p> <p>4. In order to avoid double counting, the quantity of net removals taken into account under Article 7 of Regulation (EU) 2018/842 shall be subtracted from that Member State's quantity available for transfer to an-</p>	<p>Article 12 is amended as follows:</p> <p>(a) paragraph 3 is deleted;</p> <p>(b) the following paragraphs 5 and 6 are added:</p> <p>'5. Member States may use revenues generated by transfers pursuant to paragraph 2 to tackle climate change in the Union or in third countries and shall inform the Commission of any such actions taken.</p> <p>6. Any transfer pursuant to paragraph 2 may be the result of a greenhouse gas mitigation project or programme carried out in the selling Member State and remunerated by the receiving Member State, provided that double counting is avoided and traceability is ensured.';</p>	<ul style="list-style-type: none"> • Mahdollisuus siirtää ylimääräiset poistot kaudelta 2021–2025 kauteen 2026–2030 poistetaan (3 kohta). • Jäsenmaat voivat käyttää siirroista saatuja tuloja ilmastonmuutoksen torjumiseen unionissa tai kolmansissa maissa ja niiden on ilmoitettava komissiolle kaikista tällaisista toimenpiteistä. • Siirto voi johtua myyjäjäsenvaltiossa toteutetusta ja vastaanottavan jäsenvaltion korvaamasta kasvihuonekaasujen vähentämishankkeesta tai -ohjelmasta, jos kaksinkertainen laskeminen vältetään ja jäljitettävyyden voidaan varmistaa. • Tässä artiklassa käytetään termejä 'total emissions' ja 'total removals' ilman viittausta tämän asetuksen velvoitteen täyttämiseksi tehtävään laskentaan. Tämä on ollut epäselvää, tarkoitetaanko todella LU-LUCF-sektorin kokonaispäästöjä ja -poistumia, vai päästöjä/poistumia laskentasääntöjen jälkeen. Tässä suhteessa ei muutosta ehdotuksessa. • Para 4: Kohta 3 poistetaan, mutta 4 kohdassa viitataan edelleen 3 kohtaan, sekä poistumien tallennus mahdollisuuteen.

<p>other Member State or for banking pursuant to paragraphs 2 and 3 of this Article.</p>		
<p><i>Article 13</i></p> <p>Managed forest land flexibility</p> <p>1. Where total emissions exceed total removals in the land accounting categories referred to in Article 2, accounted for in accordance with this Regulation, in a Member State, that Member State may use the managed forest land flexibility set out in this Article in order to comply with Article 4.</p> <p>2. Where the result of the calculation referred to in Article 8(1) is a positive figure, the Member State concerned shall be entitled to compensate those emissions provided that:</p> <p>(a) the Member State, in its strategy submitted in accordance with Article 4 of Regulation (EU) No 525/2013, has included ongoing or planned specific measures to ensure the conservation or enhancement, as appropriate, of forest sinks and reservoirs; and</p> <p>(b) within the Union, total emissions do not exceed total removals in the land accounting categories referred to in Article 2 of this Regulation for the period for which the Member State intends to use the compensation. When assessing whether, within the Union, total emissions exceed total removals, the Commission shall ensure that double counting is avoided by Member States, in particular in the exercise of the flexibilities set out in this Regulation and Regulation (EU) 2018/842</p> <p>3. As regards the amount of compensation, the Member State concerned may only compensate:</p> <p>(a) sinks accounted for as emissions against its forest reference level; and</p> <p>(b) up to the maximum amount of compensation for that Member State set out in Annex VII for the period from 2021 to 2030.</p>	<p>Article 13 is replaced by the following:</p> <p><i>Article 13</i></p> <p>Managed forest land flexibility</p> <p>'1. Where, in the period from 2021 to 2025, total emissions exceed total removals in the land accounting categories referred to in Article 2(1), [accounted for in accordance with this Regulation,] in a Member State, that Member State may use the managed forest land flexibility set out in this Article in order to comply with Article 4(1).</p> <p>2. Where, in the period from 2021 to 2025, the result of the calculation referred to in Article 8(1) is a positive figure, the Member State concerned shall be entitled to compensate emissions resulted from the calculation provided that the following conditions are fulfilled:</p> <p>(a) the Member State has included in its strategy submitted in accordance with Article 15 of Regulation (EU) 2018/1999 ongoing or planned specific measures to ensure the conservation or enhancement, as appropriate, of forest sinks and reservoirs; and</p> <p>(b) total emissions within the Union do not exceed total removals in the land accounting categories referred to in Article 2(1) of this Regulation for the period from 2021 to 2025.</p> <p>When assessing whether, within the Union, total emissions exceed total removals as referred to in the first subparagraph, point (b), the Commission shall ensure that double counting is avoided by Member States, in particular in the exercise of the flexibilities set out in Article 12 of this Regulation and Articles 7(1) or 9(2) of Regulation (EU) 2018/842.</p> <p>3. The compensation referred to in paragraph 2 may only cover sinks accounted for as emissions against the forest reference level of that Member State and may not exceed 50 % of the maximum amount of compensation for the Member State concerned set out in Annex VII for the peri-</p>	<ul style="list-style-type: none"> • Artikla koskee kautta 2021–2025. • Alkuperäinen metsäjousto liitteen ANNEX VII (Regulation (EU) 2018/841) mukaan Suomelle –44,1 milj. CO₂-ekv. kaudella 2021–2030 muuttuu à –22,05 milj. t CO₂-ekv. kaudella 2021–2025. • Metsäjousto voidaan käyttää koko sektorin velvoitteen täyttämiseen, jos MFL:n on laskennallinen päästö, mutta on kuitenkin nettonielu. • Muiden ehtojen on täyttyvä. • Hakasuluissa oleva teksti selventää. • Para 4: Luonnontuhojen vaikutuksen ottaminen huomioon on lisätty tähän artiklaan.

<p>4. Finland may compensate up to 10 million tonnes of CO₂ equivalent emissions provided that it satisfies the conditions listed in points (a) and (b) of paragraph 2.</p>	<p>od from 2021 to 2025.</p> <p>4. Member States shall submit evidence to the Commission concerning the impact of natural disturbances calculated pursuant to Annex VI in order to be eligible for compensation of remaining sinks accounted for as emissions against its forest reference level, up to the full amount of unused compensation by other Member States set out in Annex VII for the period from 2021 to 2025. In case the demand for compensation exceeds the amount of unused compensation available, the compensation shall be distributed proportionally among the Member States concerned.;</p>	
	<p>the following Article 13a is inserted:</p> <p>'Article 13a</p> <p>Additional compensations</p> <p>1. Finland may compensate up to an additional 5 million tonnes of CO₂ equivalent accounted emissions under the land accounting categories managed forest land, deforested land, managed cropland and managed grassland, in the period from 2021 to 2025, provided that the following conditions are fulfilled:</p> <p>(a) Finland included in its strategy submitted in accordance with Article 15 of Regulation (EU) 2018/1999 ongoing or planned specific measures to ensure the conservation or enhancement, as appropriate, of forest sinks and reservoirs;</p> <p>(b) total emissions within the Union do not exceed total removals in the land accounting categories referred to in Article 2(1) of this Regulation in the period from 2021 to 2025.</p> <p>When assessing whether, within the Union, total emissions exceed total removals as referred to in the first subparagraph, point (b), the Commission shall ensure that double counting is avoided by Member States, in particular in the exercise of the flexibilities set out in Article 12 and 13 of this Regulation and Articles 7(1) or 9(2) of Regulation (EU) 2018/842.</p>	<ul style="list-style-type: none"> • Uusi artikla, koskee kautta 2021–2025. • Jos metsäjousto ei riitä: <ul style="list-style-type: none"> ○ Käytettävissä olevan kompensaation määrä Suomelle on 5 milj. t CO₂-ekv., eli puolet nykyisestä määrästä, koska sitä sovelletaan vain vuoden 2025 loppuun asti. Alkuperäisessä asetuksessa kausi oli 2021–2030. ○ Kompensaatio ei saa kohdistua vuoden 2017 jälkeen tapahtuneen metsäkadon päästöihin. Korvausta saa käyttää vain 2021–2025-sitoumuksen noudattamiseen varmistaen, ettei hyvityksiä käytetä artiklan 12 joustoina eikä siirretä kaudelle 2026–2030.

	<p>2. The additional compensations are limited to:</p> <p>(a) the amount exceeding the managed forest land flexibility available to Finland in the period from 2021 to 2025 pursuant to Article 13;</p> <p>(b) the emissions created by historical change from forest land to any other land use category that occurred no later than 31 December 2017;</p> <p>(c) compliance with Article 4.</p> <p>3. The additional compensations may not be subject to transfer pursuant to Article 12 of this Regulation or Article 7 of Regulation (EU) 2018/842.</p> <p>4. Any unused additional compensations out of the amount of 5 million tonnes CO₂ equivalent referred to in paragraph 1 shall be cancelled.</p> <p>5. The Central Administrator shall carry out paragraph 2, point (a), and paragraphs 3 and 4 of this Article in the Union Registry established pursuant to Article 40 of Regulation (EU) 2018/1999.’;</p>	
	<p>the following Article 13b is inserted:</p> <p>‘Article 13b</p> <p>Land use flexibility mechanism for the period 2026 to 2030</p> <p>1. A land use flexibility mechanism corresponding to a quantity of up to 178 million tonnes of CO₂ equivalent shall be established in the Union Registry established pursuant to Article 40 of Regulation (EU) No 2018/1999, subject to the fulfilment of the Union target referred to in Article 4(2). The flexibility mechanism shall be available in addition to the flexibilities provided for in Article 12.</p> <p>2. Where, in the period from 2026 to 2030, the difference between the annual sum of the greenhouse gas emissions and removals on the territory of a Member State and in all of the land reporting categories referred to in Article 2(2), points (a) to (j), and the corresponding target is positive, accounted and reported in accordance with this Regulation, that Member State may use the flexibility set out in this Article in order to comply with its target set out pur-</p>	<ul style="list-style-type: none"> • Uusi artikla, koskee kautta 2026–2030. • Tarkoitettu auttamaan jäsenvaltioita selviytymään alan epävarmuuksista, erityisesti luonnonkatastrofeista.

suant to Article 4(2).

3. Where, in the period from 2026 to 2030, the result of the calculation referred to in paragraph 2 is positive, the Member State concerned shall be entitled to compensate the excess emissions provided that the following conditions are fulfilled:

(a) the Member State has included in its updated integrated national energy and climate plan submitted pursuant to Article 14 of Regulation (EU) 2018/1999 ongoing or planned specific measures to ensure the conservation or enhancement, as appropriate, of all land sinks and reservoirs, and to reduce the vulnerability of the land to natural disturbances;

(b) the Member State has exhausted all other flexibilities available pursuant to this Article 12 of this Regulation or Article 7(1) of Regulation (EU) 2018/842;

€ the difference in the Union between the annual sum of all greenhouse gas emissions and removals on its territory and in all of the land reporting categories referred to in Article 2(2), points (a) to (j), and the Union target [of 310 million tonnes CO₂ equivalent of net removals] is negative, in the period from 2026 to 2030.

When assessing whether, within the Union, total emissions exceed total removals as referred to in the first subparagraph, point (c), the Commission shall determine whether to include 20% of net removals not banked by Member States from the period from 2021 to 2025 on the basis of the impact of natural disturbances and applying information submitted by Member States in accordance with paragraph 5 of this Article. The Commission shall in that assessment also ensure that double counting is avoided by Member States, in particular in the exercise of the flexibilities set out in Article 12 of this Regulation and Article 7(1) of Regulation (EU) 2018/842.

4. The amount of the compensation referred to in paragraph 3 of this Article may only cover sinks accounted for

	<p>as emissions against the target of the Member State in Annex Iia of this Regulation and may not exceed 50 % of the maximum amount of compensation for the Member State concerned set out in Annex VII for the period from 2026 to 2030.</p> <p>5. Member States shall submit evidence to the Commission concerning the impact of natural disturbances calculated pursuant to Annex VI, in order to be eligible for compensation of remaining sinks accounted for as emissions against the target of a Member State concerned set out in Annex Iia, up to the full amount of unused compensation by other Member States set out in Annex VII for the period from 2026 to 2030. In case the demand for compensation exceeds the amount of unused compensation available, the compensation shall be distributed proportionally among the Member States concerned.'</p>	
	<p>the following Article 13c is inserted: Article 13c Governance of the targets If the reviewed greenhouse gas emissions and removals of a Member State in 2032 exceed the annual targets of that Member State for any specific year of the period 2026 to 2030, taking into account the flexibilities used pursuant to Articles 12 and 13b, the following measure shall apply: An amount equal to the amount in tonnes of CO₂ equivalent of the excess greenhouse gas net emissions, multiplied by a factor of 1,08, shall be added to the greenhouse gas emission figure reported by that Member State in the following year, in accordance with the measures adopted pursuant to Article 15.';</p>	<ul style="list-style-type: none"> • Uusi artikla, koskee kautta 2026–2030.
<p><i>Article 14</i> Compliance check 1. By 15 March 2027 for the period from 2021 to 2025, and by 15 March 2032 for the period from 2026 to 2030, Member States shall submit to the Commission a compliance report containing the balance of total</p>	<p>in Article 14, paragraph 1 is replaced by the following: '1. By 15 March 2027 for the period from 2021 to 2025, and by 15 March 2032 for the period from 2026 to 2030, Member States shall submit to the Commission a compliance report containing the balance of total emissions and total removals for the relevant period on each of the land accounting categories specified in Article 2(1), points (a) to</p>	<ul style="list-style-type: none"> • Lisätään, että artiklassa 2(1) listattu kohdat a-f koskevat jaksoa 2021–2025 ja artiklassa 2(2) listattu kohdat a- j koskevat jaksoa 2026–2030. • Lisätään, että vaatimustenmukaisuuskertomukseen on sisällyttävä arviot politiikoista ja toimenpiteistä, ilmastonmuutoksen hillinnän ja siihen sopeutumisen välisistä synergioista sekä ilmastonmuutoksen

<p>emissions and total removals for the relevant period on each of the land accounting categories specified in Article 2, using the accounting rules laid down in this Regulation.</p> <p>Such report shall also contain, where applicable, details on the intention to use the flexibilities referred to in Article 11 and related amounts or on the use of such flexibilities and related amounts.</p> <p>2. The Commission shall carry out a comprehensive review of the compliance reports, provided under paragraph 1 of this Article, for the purpose of assessing compliance with Article 4.</p> <p>3. The Commission shall prepare a report in 2027, for the period from 2021 to 2025, and in 2032, for the period from 2026 to 2030, on the Union's total emissions and total removals of greenhouse gases for each of the land accounting categories referred to in Article 2 calculated as the total reported emissions and total reported removals for the period minus the value obtained by multiplying by five the Union's average annual reported emissions and removals in the period from 2000 to 2009.</p> <p>4. The European Environment Agency shall assist the Commission in the implementation of the monitoring and compliance framework provided for in this Article, in accordance with its annual work programme.</p>	<p>(f), for the period from 2021 to 2025 and in Article 2(2), points (a) to (j) for the period from 2026 to 2030, using the accounting rules laid down in this Regulation.</p> <p>The compliance report shall include an assessment of:</p> <p>a) the policies and measures regarding trade-offs;</p> <p>b) the synergies between climate mitigation and adaptation;</p> <p>c) synergies between climate mitigation and biodiversity.</p> <p>Such report shall also contain, where applicable, details on the intention to use the flexibilities referred to in Article 11 and related amounts or on the use of such flexibilities and related amounts.;</p>	<p>hillinnän ja luonnon monimuotoisuuden välisistä synergioista.</p>
<p><i>Article 15</i></p> <p>Registry</p> <p>1. The Commission shall adopt delegated acts in accordance with Article 16 of this Regulation to supplement this Regulation in order to lay down the rules for the recording of the quantity of emissions and removals for each land accounting category in each Member State and to ensure that the accounting carried out in relation to the exercise of the flexibilities pursuant to Articles 12 and 13 of this Regulation through the Union</p>	<p>in Article 15, paragraph 1 is replaced by the following:</p> <p>'1. The Commission shall adopt delegated acts in accordance with Article 16 of this Regulation to supplement this Regulation in order to lay down the rules for the recording and an accurate carrying out of the following operations in the Union Registry established pursuant to Article 40 of Regulation (EU) 2018/1999:</p> <p>(a) the quantity of emissions and removals for each land accounting and reporting category in each Member State;</p> <p>(b) the exercise of the technical correction pursuant to</p>	<ul style="list-style-type: none"> • Viittaus Regulation (EU) No 525/2013 10 artiklaan muutetaan viittauksiksi Regulation (EU) 2018/1999 40 artiklaan. • Asetusehdotuksen (b) ja (c)-kohdassa viitataan myös artikloihin 13a, 13b ja 13c.

<p>Registry established pursuant to Article 10 of Regulation (EU) No 525/2013 is accurate.</p> <p>2. 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.</p> <p>3. The information referred to in paragraphs 1 and 2 shall be accessible to the public.</p>	<p>Article 4(3) of this Regulation;</p> <p>(c) the exercise of the flexibilities pursuant to Articles 12, 13, 13a and 13b and</p> <p>(d) compliance with the targets pursuant to Article 13c.;</p>	
<p><i>Article 16</i></p> <p>Exercise of delegation</p> <p>1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.</p> <p>2. The power to adopt delegated acts referred to in Articles 3(2), 5(6), 8(8) and (9), 9(2), 10(3) and 15(1) shall be conferred on the Commission for a period of five years from 9 July 2018. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-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.</p> <p>3. The delegation of powers referred to in Articles 3(2), 5(6), 8(8) and (9), 9(2), 10(3) and 15(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 <i>Official Journal of the European Union</i> or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.</p> <p>4. Before the adoption of a delegated act, the Commission shall consult experts designated by each Member</p>	<p>the following Article 16a is inserted:</p> <p>Article 16a</p> <p>Committee procedure</p> <p>1. The Commission shall be assisted by the Climate Change Committee established by Article 44(3) of Regulation (EU) 2018/1999. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011 of the European Parliament and of the Council⁴⁴.</p> <p>2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.</p>	<ul style="list-style-type: none"> • Uusi artikla. • Komissiota avustaa ilmastonmuutoskomitea, joka perustettiin asetuksen (EU) 2018/1990 44 artiklan 3 kohdalla, ja se on Euroopan parlamentin ja neuvoston asetuksessa (EU) N:o 182/2011441 tarkoitettu komitea.

<p>State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.</p> <p>5. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.</p> <p>6. A delegated act adopted pursuant to Articles 3(2), 5(6), 8(8) and (9), 9(2), 10(3) and 15(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 to the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.</p>		
<p><i>Article 17</i></p> <p>Review</p> <p>1. This Regulation shall be kept under review taking into account, inter alia, international developments and efforts undertaken to achieve the long-term objectives of the Paris Agreement.</p> <p>On the basis of the findings of the report prepared pursuant to Article 14(3) and the results of the assessment carried out pursuant to point (b) of Article 13(2), the Commission shall, where appropriate, make proposals to ensure that the integrity of the Union's overall 2030 greenhouse gas emission reduction target and its contribution to the goals of the Paris Agreement are respected.</p> <p>2. The Commission shall submit a report to the European Parliament and to the Council, within six months of each global stocktake agreed under Article 14 of the Paris Agreement, on the operation of this Regulation, including, where relevant, an assessment of the impacts</p>	<p>in Article 17, paragraph 2 is replaced by the following:</p> <p>'2. The Commission shall submit a report to the European Parliament and to the Council, no later than six months after [...] global stocktake agreed under Article 14 of the Paris Agreement, on the operation of this Regulation, including, where relevant, an assessment of the impacts of the flexibilities referred to in Article 11, as well as on the contribution of this Regulation 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 the necessary increase in greenhouse gas emissions reductions and removals in the Union.</p> <p>Following the report, the Commission shall make legislative proposals where it deems it appropriate. In particular, the proposals shall set out annual targets and governance aiming towards the 2035 climate-neutrality target as laid down in Article 4(4), additional Union policies and</p>	<ul style="list-style-type: none"> • Alkuperäisen asetuksen mukaan kertomuksen tulee sisältää vuoden 2030 jälkeistä aikaa koskevat puitteet. Tämä osa poistetaan.

<p>of the flexibilities referred to in Article 11, as well as on the contribution of this Regulation 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, including a post-2030 framework, in view of the necessary increase in greenhouse gas emissions reductions and removals in the Union, and shall make proposals if appropriate.</p>	<p>measures, and a post-2035 framework, including in the scope of the Regulation greenhouse gas emissions and removals from additional sectors, such as the marine and freshwater environment.';</p>	<ul style="list-style-type: none"> • Uusia sektoreita 2035 jälkeen?
<p><i>Article 18</i> Amendments to Regulation (EU) No 525/2013</p>	<p>Ei muutoksia</p>	
<p><i>Article 19</i> Amendment to Decision No 529/2013/EU Decision No 529/2013/EU is amended as follows: (1) in Article 3(2), the first subparagraph is deleted; (2) in Article 6, paragraph 4 is deleted.</p>	<p>Ei muutoksia</p>	
<p><i>Article 20</i> Entry into force</p>	<p>Ei muutoksia</p>	
<p>LIITTEET</p>		
<p>ANNEX I GREENHOUSE GASES AND CARBON POOLS A. Greenhouse gases as referred to in Article 2: (a) carbon dioxide (CO₂); (b) methane (CH₄); € nitrous oxide (N₂O). Those greenhouse gases shall be expressed in terms of tonnes of CO₂ equivalent and determined pursuant to Regulation (EU) No 525/2013. B. Carbon pools as referred to in Article 5(4): (a) above-ground biomass;</p>	<p>Annex I is amended in accordance with Annex I to this Regulation; In Annex I to Regulation (EU) 2018/841, section B is replaced by the following: 'B. Carbon pools as referred to in Article 5(4): (a) living biomass; (b) litter¹; (c) deadwood¹; (d) dead organic matter²; (e) mineral soils; (f) organic soils; (g) harvested wood products in the land accounting cate-</p>	<ul style="list-style-type: none"> • 5 artiklan 4 kohdan soveltamisalaan kuuluvia hiilivarastoja muutetaan. <ul style="list-style-type: none"> ◦ Huom. tässä artiklassa edelleen hiilivarasto 'above-ground biomass'. • Puutuotteet sisältyvät kaudella 2021–2025 tilinpito-luokkiin metsitetty maa ja hoidettu metsämaa. Vuodesta 2026 eteenpäin puutuotteet raportoidaan omana päästöluokkanaan kuten khk-inventaariossa tehdään, mutta rajataan metsitetyiltä alueilta ja hoidetulta metsämaalta peräisin oleviin tuotteisiin. Tämän mukaan esim. maankäytön muutoksista metsästä muuhun käyttöön korjatusta puusta valmistettuja tuotteita ei lasketa mukaan puutuottei-

<p>(b) below-ground biomass; (c) litter; (d) dead wood; (e) soil organic carbon; (f) harvested wood products in the land accounting categories of afforested land and managed forest land.</p>	<p>gories of afforested land and managed forest land.’</p> <p>1 Applies to Afforested Land and Managed Forest Land only. 2 Applies to Deforested Land, Managed Cropland, Managed Grassland and Managed Wetlands only.</p>	<p>siin. Vuodesta 2026 lähtien käytössä ei ole käytössä luokkia ‘metsitetty alue’ ja ‘hoidettu metsämaa’ näillä nimillä, joten tekstiä muokattava näiltä osin.</p> <ul style="list-style-type: none"> • Olisi selkeämpää, jos hiilivarastot määriteltäisiin kuten IPCC-ohjeessa. Tässä määrätään, miten karikkeen ja kuollon puuaineksen hiilivarastojen muutoksia raportoidaan, erillisinä vai aggregoituina tietona. Aggregoitu tieto kuitenkin yleensä sisältää molemmat hiilivarastot. Esim. metsäkadon ‘dead organic matter’ sisältää karikkeen ja kuolleen puun hajoamisen. Maanpäällisen ja maanalaisen biomassan erottaminen tehdään tällä hetkellä vain KP-raportoinnissa, joten ok, ettei niitä jatkossa eroteta. Puutuotteita ei saa ottaa mukaan muista maankäytöistä. Tämä eroaa UNFCCC:n raportoinnista, joten kaksi laskentaa edelleen. Jos halutaan välttää HWP:n ottaminen mukaan laskentaan metsäkatoaloita, voi sen rajoittaa niihin. Sen sijaan esim. samassa maankäytössä pysyneiltä, esim. rakennettuna maana pysyneiltä peräsin olevien puutuotteiden ottamista mukaan voisi harkita. <i>Miten agro-forestry sopii tähän?</i> Tässä ei mainita muita hiiltä sitovia tuotteita, mihin ne sijoittuvat? 								
<p>ANNEX II MINIMUM VALUES FOR AREA SIZE, TREE CROWN COVER AND TREE HEIGHT PARAMETERS</p>	<p>ANNEX II The following Annex IIa to Regulation (EU) 2018/841 is inserted:</p> <p>‘Annex IIa The Union target and the national targets of the Member States of net greenhouse gas removals pursuant to Article 4(2) to be achieved in 2030</p> <table border="1" data-bbox="750 1187 1370 1383"> <thead> <tr> <th>State</th> <th>Value of the net greenhouse gas emissions reduction in kt of CO2 equivalent in 2030</th> </tr> </thead> <tbody> <tr> <td>Belgium</td> <td>-1 352</td> </tr> <tr> <td>Bulgaria</td> <td>-9 718</td> </tr> <tr> <td>Czechia</td> <td>-1 228</td> </tr> </tbody> </table>	State	Value of the net greenhouse gas emissions reduction in kt of CO2 equivalent in 2030	Belgium	-1 352	Bulgaria	-9 718	Czechia	-1 228	<ul style="list-style-type: none"> • Maakohtaiset nettonielutavoitteet vuodelle 2030 lisätään.
State	Value of the net greenhouse gas emissions reduction in kt of CO2 equivalent in 2030									
Belgium	-1 352									
Bulgaria	-9 718									
Czechia	-1 228									

	Denmark	5 338	
	Germany	-30 840	
	Estonia	-2 545	
	Ireland	3 728	
	Greece	-4 373	
	Spain	-43 635	
	France	-34 046	
	Croatia	-5 527	
	Italy	-35 758	
	Cyprus	-352	
	Latvia	-644	
	Lithuania	-4 633	
	Luxembourg	-403	
	Hungary	-5 724	
	Malta	2	
	Netherlands	4 523	
	Austria	-5 650	
	Poland	-38 098	
	Portugal	-1 358	
	Romania	-25 665	
	Slovenia	-146	
	Slovakia	-6 821	
	Finland	-17 754	
	Sweden	-47 321	
	EU-27	-310 000	
ANNEX III BASE YEAR OR PERIOD FOR THE PURPOSE OF CALCULATING THE CAP PURSUANT TO ARTICLE 8(2)	Ei muutoksia		
ANNEX IV NATIONAL FORESTRY ACCOUNTING PLAN CONTAINING A MEMBER STATE'S FOREST REFERENCE LEVEL	Ei muutoksia		
ANNEX V FIRST ORDER DECAY FUNCTION, METHODOLOGIES AND DEFAULT HALF-LIFE VALUES FOR HARVESTED	Ei muutoksia		

WOOD PRODUCTS		
ANNEX VI CALCULATION OF BACKGROUND LEVELS FOR NATURAL DISTURBANCES	Ei muutoksia	
ANNEX VII MAXIMUM AMOUNT OF COMPENSATION AVAILABLE UNDER THE MANAGED FOREST LAND FLEXIBILITY REFERRED TO IN POINT (B) OF ARTICLE 13(3)	Ei muutoksia	

Liite 2. Muutosehdotukset hallintomalliasetukseen

Punaisella värillä merkityt osiot ovat kirjoittajien korostamia kohtia

Regulation (EU) 2018/1999	Muutosehdotus	Lisätietoja	Kommentit
<p>Article 2</p> <p>Definitions</p>	<p>in Article 2, the following points (63) and (64) are added:</p> <p>'(63) 'geographic information system' means a computer system capable of capturing, storing, analysing, and displaying geographically referenced information;</p> <p>'(64) 'geo-spatial application' means an electronic application form that includes an IT application based on a geographic information system that allows beneficiaries to spatially declare the agricultural parcels of the holding and non-agricultural areas claimed for payment.';</p>	<p>Uudet määritelmät.</p>	<p>Määritelmä 64: Rajaus vaikuttaa ahtaalta, miksi koskee vain näitä mainittuja asioita? Kuuluuko määritelmä 64 hallintomalliasetukseen, etenkin niin, että sen tarve tulee LULUCF-asetuksesta?</p>
<p>Article 4</p> <p>National objectives, targets and contributions for the five dimensions of the Energy Union</p> <p>Each Member State shall set out in its integrated national energy and climate plan the following main objectives, targets and contributions, as specified in point 2 of section A of Annex I: (a) as regards the dimension 'Decarbonisation': (1) with respect to greenhouse gas emissions and removals and with a view to contributing to the achievement of the economy wide Union greenhouse gas emission reduction target:</p>	<p>in point (a)(1) of Article 4, point (ii) is replaced by the following:</p> <p>'the Member State's commitments and national targets for net greenhouse gas removals pursuant to Article 4(1) and (2) of Regulation (EU) 2018/841 and its contributions aim towards reaching the Union objective of reducing greenhouse gas emissions to net zero by 2035 and achieving negative emissions thereafter pursuant to Article 4(4) of that Regulation;';</p>	<p>Muutos: kansallisia tavoitteita ja sitoumuksista ilmastoneutraaliuteen vuonna 2035 tulee sisällyttää integroituun kansalliseen energia- ja ilmastosuunnitelmaan.</p>	

<p>(i) the Member State's binding national target for greenhouse gas emissions and the annual binding national limits pursuant to Regulation (EU) 2018/842; 21.12.2018 L 328/17 Official Journal of the European Union EN</p> <p>(ii) the Member State's commitments pursuant to Regulation (EU) 2018/841;</p> <p>(iii) where applicable to meet the objectives and targets of the Energy Union and the long-term Union greenhouse gas emissions commitments consistent with the Paris Agreement, other objectives and targets, including sector targets and adaptation goals.</p>			
<p><i>Article 38</i></p> <p>Inventory review</p> <p>1. With a view to monitoring Member States' greenhouse gas emission reductions or limitations pursuant to Articles 4, 9 and 10 of Regulation (EU) 2018/842 and their reduction of emissions and enhancement of removals by sinks pursuant to Articles 4 and 14 of Regulation (EU) 2018/841 and any other greenhouse gas emission reduction or limitation targets set out in Union law, the Commission shall, in 2027 and 2032, carry out a comprehensive review of the national inventory data submitted by Member States pursuant to Article 26(4) of this Regulation. Member States shall participate fully in that process.</p> <p>2. The comprehensive review referred to in paragraph 1 shall include: (a) checks to verify the transparency, accuracy, consistency, comparability and completeness</p>	<p>Article 38 is amended as follows:</p> <p>(a) the following paragraph 1a is inserted: 'In 2025, the Commission shall carry out a comprehensive review of the national inventory data submitted by Member States pursuant to Article 26(4) of this Regulation, in order to determine the annual targets of net greenhouse gas emissions reduction of the Member States pursuant to Article 4(3) of Regulation (EU) 2018/841 and in order to determine the annual emission allocations of the Member States pursuant to Article 4(3) of Regulation (EU) 2018/842';</p> <p>(b) in paragraph 2, the introductory sentence is replaced by the following: 'The comprehensive review referred to in paragraphs 1 and 1a shall include:'</p>	<p>Komission kattava tarkastus 2025, ja mitä sen tulee sisältää, lisätään artikkeliin.</p>	

<p>of information submitted;</p> <p>(b) checks to identify cases where inventory data are prepared in a manner which is inconsistent with UNFCCC guidance documentation or Union rules;</p> <p>(c) checks to identify cases where LULUCF accounting is carried out in a manner which is inconsistent with UNFCCC guidance documentation or Union rules, and</p> <p>(d) where appropriate, calculating the resulting technical corrections necessary, in consultation with the Member States.</p> <p>3. The Commission, assisted by the Climate Change Committee referred to in point (a) of Article 44(1), shall adopt implementing acts to determine the timing and the procedure for carrying out the comprehensive review, including the tasks set out in paragraph 2 of this Article, and ensuring due consultation of the Member States with regard to the conclusions of the reviews. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 44(6).</p> <p>4. The Commission shall, by means of an implementing act, determine the total sum of emissions for the relevant years arising from the corrected inventory data for each Member State upon completion of the review split between emission data relevant for Article 9 of Regulation (EU) 2018/842 and emission data referred to in point (c) of Part 1 of Annex V to this Regulation and also determine the total sum of emissions and removals relevant for Article 4 of Regulation (EU) 2018/841.</p>	<p>(c) paragraph 4 is replaced by the following:</p> <p>'Upon completion of the comprehensive review carried out pursuant to paragraph 1, the Commission shall, by means of implementing acts, determine the total sum of emissions for the relevant years arising from the corrected inventory data for each Member State split between emission data relevant for Article 9 of Regulation (EU) 2018/842 and emission</p>		
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<p>5. The data for each Member State as recorded in the registries set up pursuant to Article 15 of Regulation (EU) 2018/841 four months following the date of publication of an implementing act adopted pursuant to paragraph 4 of this Article, shall be used for the compliance check with Article 4 of Regulation (EU) 2018/841, including changes to such data arising as a result of that Member State making use of the flexibilities pursuant to Article 11 of Regulation (EU) 2018/841.</p> <p>6. The data for each Member State as recorded in the registries set up pursuant to Article 12 of Regulation (EU) 2018/842 two months following the compliance check date with Regulation (EU) 2018/841 referred to in paragraph 5 of this Article, shall be used for the compliance check pursuant to Article 9 of Regulation (EU) 2018/842 for the years 2021 and 2026. The compliance check pursuant to Article 9 of Regulation (EU) 2018/842 for each of the years 2022 to 2025 and 2027 to 2030 shall be performed at a date falling one month following the date of the compliance check for the previous year. This check shall include changes to such data arising as a result of that Member State making use of the flexibilities pursuant to Articles 5, 6 and 7 of Regulation (EU) 2018/842.</p>	<p>data referred to in Part 1, point (c), of Annex V to this Regulation, and determine the total sum of emissions and removals relevant for Article 4 of Regulation (EU) 2018/841.;</p>		
<p>LIITTEET</p>			
<p>ANNEX V GHG INVENTORIES INFORMATION Part 3 Methodologies for monitoring and</p>	<p>ANNEX III Part 3 of Annex V to Regulation (EU) 2018/1999 is replaced by the following:</p>	<p>Liitteeseen ehdotetaan merkittäviä muutoksia verrattuna nykyiseen:</p> <ul style="list-style-type: none"> • Edellytetään sähköisten tietokantojen 	<p>Sähköisten aineistojen käyttö ei sinällään Suomelle ole uusi asia, mutta mitä käytännössä edellytetään, jää avoimeksi. Aineistoluettelon loppuksi todetaan, että inventaarion tulee pysyä vaihtamaan ja yhdistämään tietoja tieto-</p>

<p>reporting in the LULUCF sector</p> <p>Geographically explicit land-use conversion data in accordance with the 2006 IPCC Guidelines for national GHG inventories.</p> <p>Tier 1 methodology in accordance with the 2006 IPCC guidelines for national GHG inventories.</p> <p>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 GHGs in terms of the absolute level of emissions and removals, the trend in emissions and removals in the land-use categories, at least Tier 2 methodology in accordance with the 2006 IPCC guidelines for national GHG inventories. Member States are encouraged to apply Tier 3 methodology, in accordance with the 2006 IPCC guidelines for national GHG inventories.</p>	<p>'Geographically explicit land-use conversion data in accordance with the 2006 IPCC Guidelines for national GHG inventories. The greenhouse gas inventory shall operate on the basis of electronic databases and geographic information systems, and comprise:</p>	<p>ja paikkatietojen käyttöä.</p> <ul style="list-style-type: none"> • Luettelo inventaarioon sisällytettävistä aineistoista, jotka perustuvat ase- tuksiin, direktiiveihin ja suunnitelmiin. 	<p>kantojen ja paikkatietojärjestelmien välillä. Tuleeko tietojen vaihdon olla kaksisuuntaista (<i>exchange</i>)? Edellyttää mittavaa järjestelmien yhteen sovittamista.</p> <p>Lista huomioon otettavista alueista on pitkä, ja niiden merkityksestä kasvihuonekaasuinventaarion kannalta osa vaikuttaa epärelevanteilta.</p> <ul style="list-style-type: none"> • Inventaarion tehtävä ei ole seurata näitä alueita • Määritelmät erilaiset kuin inventaariossa • Onko alueilta käytettävissä sellaista tietoa, jota tarvitaan päästöjen ja poistumien laskentaan? • Alueet voivat olla hyvin pieniä • Tällaisten alueiden seuranta inventaariossa edellyttää koko seurannan uudelleen suunnittelua ja järjestämistä yhteistyössä eri tahojen kanssa • Resurssit kohdentuvat näiden alueiden seurantaan ja laskentojen kehittämiseen, pois muusta laskennasta
	<p>(a) a system for the monitoring of land use units with high-carbon stock land, as defined in Article 29(4) of Directive 2018/2001;</p>	<p>DIRECTIVE (EU) 2018/2001 on the promotion of the use of energy from renewable sources</p> <p>Article 29(4): Biofuels, bioliquids and biomass fuels produced from agricultural biomass taken into account for the purposes referred to in points (a), (b) and (c) of the first subparagraph of paragraph 1 shall not be made from raw material obtained from land with high-carbon stock, namely land that had one of the following statuses in January 2008 and no longer has that status:</p> <p>(a) wetlands, namely land that is covered with or saturated by water permanently or for a significant part of the year;</p> <p>(b) continuously forested areas, namely land spanning more than one hectare with trees higher than five</p>	<p>RED II-direktiivi oli saatettava osaksi kansallista lainsäädäntöä viimeistään 30 päivänä kesäkuuta 2021.</p> <p>RED II:ssa säädetään sitovasta unionin yleistavoitteesta, jonka mukaan uusiutuvista lähteistä peräisin olevan energian osuus on vähintään 32 prosenttia unionin energian kokonaisloppukulutuksesta vuonna 2030. Jäsenvaltioiden on asetettava kansalliset panoksensa unionin yleistavoitteen saavuttamiseksi osana jäsenvaltioiden yhdenmukaisia kansallisia energia- ja ilmastosuunnitelmia hallintomallisuudessa (EU) 2018/1999 vahvistetun hallinto-</p>

		metres and a canopy cover of more than 30 %, or trees able to reach those thresholds in situ; (c) land spanning more than one hectare with trees higher than five metres and a canopy cover of between 10 % and 30 % , or trees able to reach those thresholds in situ, unless evidence is provided that the carbon stock of the area before and after conversion is such that, when the methodology laid down in Part C of Annex V is applied, the conditions laid down in paragraph 10 of this Article would be fulfilled. This paragraph shall not apply if, at the time the raw material was obtained, the land had the same status as it had in January 2008.	prosessin mukaisesti (valtioneuvosto). Ei sisällä paikkatietoaineistoa. Kasvihuonekaasuinventariosta poikkeava metsän määritelmä <ul style="list-style-type: none"> • Minimipinta-ala, joka Suomella on 0,5 ha • Latvuspeitto Suomella min. 10 %
	(b) a system for the monitoring of land use units subject to protection , defined as land covered by one or more of the following categories:		
	- Land with a high biodiversity value as defined in Article 29(3) of Directive 2018/2001;	DIRECTIVE (EU) 2018/2001 on the promotion of the use of energy from renewable sources Article 29(3). Biofuels, bioliquids and biomass fuels produced from agricultural biomass taken into account for the purposes referred to in points (a), (b) and (c) of the first subparagraph of paragraph 1 shall not be made from raw material obtained from land with a high biodiversity value , namely land that had one of the following statuses in or after January 2008, whether or not the land continues to have that status: (a) primary forest and other wooded land, namely forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed; (b) highly biodiverse forest and other wooded land which is species-rich and not degraded, or has been identified as being highly biodiverse by the relevant competent authority, unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes; (c) areas designated: (i) by law or by the relevant competent authority for nature protection purposes; or (ii) for the protection of rare, threatened or endangered ecosystems or species recognised by international agreements or included in lists drawn up by intergovernmental organisations or the International Union for the Conservation of Nature, subject to their recognition in accordance with the first	Kts. RED II-direktiivi yllä.

		<p>subparagraph of Article 30(4), unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes;</p> <p>(d) highly biodiverse grassland spanning more than one hectare that is:</p> <p>(i) natural, namely grassland that would remain grassland in the absence of human intervention and that maintains the natural species composition and ecological characteristics and processes; or</p> <p>(ii) non-natural, namely grassland that would cease to be grassland in the absence of human intervention and that is species-rich and not degraded and has been identified as being highly biodiverse by the relevant competent authority, unless evidence is provided that the harvesting of the raw material is necessary to preserve its status as highly biodiverse grassland.</p> <p>The Commission may adopt implementing acts further specifying the criteria by which to determine which grassland are to be covered by point (d) of the first subparagraph of this paragraph. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 34(3).</p>	
	<p>- Sites of Community Importance and Special Areas of Conservation as defined by Article 4 of Council Directive 92/43/EEC¹ and land units outside of these which are subject to protection and conservation measures under Article 6(1) and (2) of that Directive in order to meet site conservation objectives;</p>	<p>COUNCIL DIRECTIVE 92/43/EEC on the conservation of natural habitats and of wild fauna and flora</p> <p>Article 4</p> <p>2. On the basis of the criteria set out in Annex III (Stage 2) and in the framework both of each of the five biogeographical regions referred to in Article 1 (c) (iii) and of the whole of the territory referred to in Article 2 (1), the Commission shall establish, in agreement with each Member State, a draft list of sites of Community importance drawn from the Member States' lists identifying those which lost one or more priority natural habitat types or priority species. Member States whose sites hosting one or more priority natural habitat types and priority species represent more than 5 % of their national territory may, in agreement with the Commission, request that the criteria listed in Annex III (Stage 2) be applied more flexibly in selecting all the sites of Community importance in their territory. The list of sites selected as sites of Community importance, identifying those which host one or more priority natural habitat types or priority species, shall be adopted by the Commission in accordance with the procedure laid down in</p>	<p>Euroopan unionin jäsenmaat raportoivat komissiolle kuuden vuoden välein luontodirektiivin toimeenpanosta. Arvioinnit tehty 2007, 2013 ja 2019 koskien aina kuutta edellistä vuotta. Suomessa raportointia hoitaa SYKE. Suomessa esiintyvät 68 luontotyyppiä jaetaan seitsemään luontotyyppiryhmään: 1) meri ja rannikko 2) sisävedet 3) nummet, niityt ja pensastot 4) tunturit 5) suot 6) kalliot 7) metsät. Raportti sisältää kunkin luontotyypin osalta tiedot arviointikriteereistä, joiden perusteella kokonaisarvio suojelun tasosta on laadittu. Arviointikriteerit ovat levinneisyys, esiintymisalue, rakenne ja toiminta sekä suojelutason odotettavissa oleva kehitys. Raportit tehdään EU:n luonnonmaantieteellisen aluejaon mukaan, eli Suomesta raportoidaan erikseen boreaalinen, alpiininen ja Itämeren alue. Paikkatietoaineistoja löytyy SYKE:n sivuilta. Vuonna 2013 - luontotyyppien esiintymät ja luontotyyppien levinneisyys, vuonna 2019 -</p>

		<p>Article 21.</p> <p>3. The list referred to in paragraph 2 shall be established within six years of the notification of this Directive.</p> <p>4. Once a site of Community importance has been adopted in accordance with the procedure laid down in paragraph 2, the Member State concerned shall designate that site as a special area of conservation as soon as possible and within six years at most, establishing priorities in the light of the importance of the sites for the maintenance or restoration, at a favourable conservation status, of a natural habitat type in Annex I or a species in Annex II and for the coherence of Natura 2000, and in the light of the threats of degradation or destruction to which those sites are exposed.</p> <p>Article 6(1). For special areas of conservation, Member States shall establish the necessary conservation measures involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans, and appropriate statutory, administrative or contractual measures which correspond to the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites.</p> <p>Article 6(2). Member States shall take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of this Directive.</p>	<p>luontotyyppien esiintymät. Pinta-alatiedot tarkempia Natura-2000 verkostoon kuuluvilta alueilta (karkeasti arvioiden yli puolet luontodirektiivin luontotyyppialueista sijaitsee Natura-alueiden ulkopuolella), joista on olemassa oma paikkatietoaineistonsa.</p> <p>https://ckan.ymparisto.fi/dataset/luontotyyppit-luontodirektiivin-raportointi</p> <p>https://ckan.ymparisto.fi/dataset/natura2000-alueet</p>
	<p>- Breeding sites and resting places of the species listed in Annex IV to Directive 92/43/EEC which are subject to protection measures under Article 12 of that Directive;</p>	<p>Article 12 of Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora:</p> <p>1. Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV (a) in their natural range, prohibiting: (a) all forms of deliberate capture or killing of specimens of these species in the wild; (b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration; (c) deliberate destruction or taking of eggs from the wild; (d) deterioration or destruction of breeding sites or resting places.</p> <p>2. For these species, Member States shall prohibit the keeping, transport and sale or exchange, and offering for sale or exchange, of specimens taken from the</p>	<p>Paikkatietoaineistoja SYKEN sivuilla:</p> <p>Lajit, luontodirektiivin raportointi 2019 sisältää yhden paikkatietoaineiston: - Lajit esiintymät, luontodirektiivin raportointi 2019</p> <p>Lajit, luontodirektiivin raportointi 2013 sisältää kaksi paikkatietoaineistoa: - Lajit esiintymät, luontodirektiivin raportointi 2013 - Lajit levinneisyys, luontodirektiivin raportointi 2013</p> <p>https://ckan.ymparisto.fi/dataset/lajit-luontodirektiivin-raportointi</p> <p>Raportit tehdään EU:n luonnonmaantieteellisen aluejaon mukaan, eli Suomesta raportoidaan erikseen boreaalinen, alpiininen ja Itämeren alue.</p>

		<p>wild, except for those taken legally before this Directive is implemented.</p> <p>3. The prohibition referred to in paragraph 1 (a) and (b) and paragraph 2 shall apply to all stages of life of the animals to which this Article applies.</p> <p>4. Member States shall establish a system to monitor the incidental capture and killing of the animal species listed in Annex IV (a). In the light of the information gathered, Member States shall take further research or conservation measures as required to ensure that incidental capture and killing does not have a significant negative impact on the species concerned.</p>	<p>Lajien lisääntymisalueisiin liittyvää tietoa voi löytyä myös yllä mainituista luontotyyppi/natura2000 aineistoista.</p>
	<p>- The natural habitats listed in Annex I to Directive 92/43/EEC and the habitats of species listed in Annex II to Directive 92/43/EEC which are found outside sites of Community importance or special areas of conservation and which contribute to these habitats and species reaching favourable conservation status under Article 2 of that Directive or which can be made subject to preventive and remedial measures under Directive 2004/35/EC²;</p>	<p>Article 2 of Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora:</p> <p>1. The aim of this Directive shall be to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of the Member States to which the Treaty applies.</p> <p>2. Measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest.</p> <p>3. Measures taken pursuant to this Directive shall take account of economic, social and cultural requirements and regional and local characteristics.</p>	<p>Kts. Paikkatietoaineistot yllä.</p>
	<p>- Special protection areas classified under Article 4 of Directive 2009/147/EEC of the European Parliament and of the Council³ and the land units outside of these which are subject to protection and conservation measures under Article 4 of Directive 2009/147/EEC and Article 6(2) of Directive 92/43/EEC in order to meet site conservation objectives;</p>	<p>Article 4 of Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds</p> <p>1. The species mentioned in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. In this connection, account shall be taken of:</p> <p>(a) species in danger of extinction;</p> <p>(b) species vulnerable to specific changes in their habitat;</p> <p>(c) species considered rare because of small populations or restricted local distribution;</p> <p>(d) other species requiring particular attention for reasons of the specific nature of their habitat.</p> <p>Trends and variations in population levels shall be taken into account as a background for evaluations. Member States shall classify in particular the most suitable territories in number and size as special</p>	<p>Virheellinen viittaus: Directive 2009/147/EEC à EC</p> <p>Liitteen I lajeja ja niitä vastaavia muuttolintuja on Suomessa yhteensä 119 lajia eli niiden elinympäristöjen suojelemiseksi on perustettu Natura 2000 -alueita.</p>

		<p>protection areas for the conservation of these species in the geographical sea and land area where this Directive applies.</p> <p>2. Member States shall take similar measures for regularly occurring migratory species not listed in Annex I, bearing in mind their need for protection in the geographical sea and land area where this Directive applies, as regards their breeding, moulting and wintering areas and staging posts along their migration routes. To this end, Member States shall pay particular attention to the protection of wetlands and particularly to wetlands of international importance.</p> <p>3. Member States shall send the Commission all relevant information so that it may take appropriate initiatives with a view to the coordination necessary to ensure that the areas provided for in paragraphs 1 and 2 form a coherent whole which meets the protection requirements of these species in the geographical sea and land area where this Directive applies.</p> <p>4. In respect of the protection areas referred to in paragraphs 1 and 2, Member States shall take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in so far as these would be significant having regard to the objectives of this Article. Outside these protection areas, Member States shall also strive to avoid pollution or deterioration of habitats.</p>	
	<p>- Land units which are subject to measures for the preservation of birds reported as being not in secure status under Article 12 of Directive 2009/147/EC in order to fulfil the requirement under Article 4(4), second sentence of that Directive to strive to avoid pollution and habitat deterioration or fulfil the requirement under Article 3 of that Directive to preserve, maintain a sufficient diversity and area of habitats for bird species;</p>	<p>Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds</p> <p>Article 12</p> <p>1. Member States shall forward to the Commission every three years, starting from 7 April 1981, a report on the implementation of national provisions taken under this Directive.</p> <p>2. The Commission shall prepare every three years a composite report based on the information referred to in paragraph 1. That part of the draft report covering the information supplied by a Member State shall be forwarded to the authorities of the Member State in question for verification. The final version of the report shall be forwarded to the Member State.</p> <p>Article 4(4). In respect of the protection areas referred to in paragraphs 1 and 2, Member States shall take appropriate steps to avoid pollution or deterioration of habitats or any disturbances affecting the birds, in</p>	<p>Euroopan unionin jäsenmaat raportoivat komissiolle kuuden vuoden välein lintudirektiivin toimeenpanosta. Raportti sisältää arvioinnin Suomessa luonnonvaraisesti pesivien sekä tärkeimpien muuttavien ja talvehtivien lintupopulaatioiden tilasta. Arviointi vuosilta 2008–2012 tehtiin vuonna 2013 ja 2013–2018 vuonna 2019. Suomen osalta 2019 raportin laati lintutyöryhmä ympäristöministeriön johdolla ja Suomen ympäristökeskuksen koordinoimana. Linnut, lintudirektiivin raportointi 2013 sisältää kaksi paikkatietoaineistoa: Linnut esiintymät, lintudirektiivin raportointi 2013 ja Linnut levinneisyys, lintudirektiivin raportointi 2013.</p> <p>Linnut, lintudirektiivin raportointi 2019 sisältää yhden paikkatietoaineiston. Aineisto sisältää</p>

			kertynyt pintavesistä jo 1960-luvulta alkaen ja olemassa olevat havaintopaikat linkitettiin seuranta- ja paikkoihin.
	- Natural flood plains or areas for the retention of flood water protected by Member States in relation to flood risk management under Directive 2007/60/EC of the European Parliament and of the Council ⁵ ;	DIRECTIVE 2007/60/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 October 2007 on the assessment and management of flood risks	Tulvadirektiivin mukaiset suojelualueet, ei löytynyt tietoa, että tulvadirektiivin nojalla olisi suojeltu alueita.
	(c) a system for the monitoring of land use units subject to restoration , defined as land covered by one or more of the following categories:		
	- Sites of community importance, special areas of conservation and special protection areas as described in point (b) above, together with the land units outside of these which have been identified as in need of restoration or compensatory measures aimed at meeting site conservation objectives;		Niiden alueiden seuranta, joiden ennallistamistarve on tunnustettu ja jotka ennallistettuna saavuttaisivat suojeltavien alueiden tavoitteet. Paikkatietoaineistoa <i>suojelualueiden ulkopuolisista ennallistamistarpeessa olevista alueista</i> ei todennäköisesti ole kovin hyvin saatavilla.
	- The habitats of wild bird species referred to in Article 4(2) of Directive 2009/147/EC or listed in Annex I thereto, which are found outside of special protection areas and which have been identified as in need of restoration measures for purposes of Directive 2009/147/EC;	Article 4(2) of Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds Member States shall take similar measures for regularly occurring migratory species not listed in Annex I, bearing in mind their need for protection in the geographical sea and land area where this Directive applies, as regards their breeding, moulting and wintering areas and staging posts along their migration routes. To this end, Member States shall pay particular attention to the protection of wetlands and particularly to wetlands of international importance.	Kts. lintudirektiivi yllä.
	- The natural habitats listed in Annex I to Directive 92/43/EEC and the habitats of species listed in Annex II to Directive 92/43/EEC outside sites of Community importance or special areas of conservation and identified as in need of restoration measures for purposes of the	Article 6 of Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage Remedial action 1. Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take: (a) all practicable steps to immediately control,	Direktiivin 2004/35/EC tarkoitus ehkäistä ympäristövahinkoja ja vahingon sattuessa velvoittaa aiheuttajan maksamaan/ennallistamaan vahingoittunut alue. Ympäristövahinkojen määrää seuraa SYKE. Tuorein raportti vuodelta 2021: Ympäristövahingot Suomessa vuosina 2013–2019, Suomen ympäristökeskuksen raportteja 8. Selvitys on jatkoa kolmelle aiem-

	<p>achievement of favourable conservation status under Directive 92/43/EEC and/or identified as in need of remedial measures for purposes of Article 6 of Directive 2004/35/EC;</p>	<p>contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and (b) the necessary remedial measures, in accordance with Article 7. 2. The competent authority may, at any time: (a) require the operator to provide supplementary information on any damage that has occurred; (b) take, require the operator to take or give instructions to the operator concerning, all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effect on human health, or further impairment of services; (c) require the operator to take the necessary remedial measures; (d) give instructions to the operator to be followed on the necessary remedial measures to be taken; or (e) itself take the necessary remedial measures. 3. The competent authority shall require that the remedial measures are taken by the operator. If the operator fails to comply with the obligations laid down in paragraph 1 or 2(b), (c) or (d), cannot be identified or is not required to bear the costs under this Directive, the competent authority may take these measures itself, as a means of last resort.</p>	<p>malle vastaavalle selvitykselle ympäristöönnettomuuksista vuosina 1989–1994, 1995–1999, 2000–2005 ja 2013–2019. Komissiolle on raportoitu kertaluontoisesti merkittäviin ympäristövahinkoihin liittyvät tiedot 30. huhtikuuta 2013 mennessä. Kaiken kaikkiaan vahinkoja tapahtunut vähän (tai sitten vahinkojen raportointi on puutteellista) ja ne ovat olleet vaikutuksiltaan pienialaisia, minkä vuoksi niiden seuraminen ja raportointi khk-inventaarion yhteydessä vaikuttaa erittäin epätarkoituksenmukaiselta. Muutosehdotus sisältää kuitenkin myös sellaisen alueiden seurannan, joiden ennallistamistarve on tunnistettu ja jotka ennallistettuina täyttäisivät luontodirektiivin mukaisten suojeltavien luontotyyppien määritelmän vaikeivat ne olisikaan ympäristövastuudirektiivin mukaisia alueita. Tällaisten alueiden kattavaa listaus- ja paikkatietoa ei todennäköisesti ole helposti saatavilla.</p>
	<p>- Areas identified as in need of restoration according to a nature restoration plan applicable in a Member State;</p>		<p>Ei viittaa mihinkään direktiiviin tai vastaavaan. Tarkoittaako esim. biodiversiteettistrategian sisältämää EU:n luonnon ennallistamista koskevaa suunnitelmaa?</p>
	<p>- Land units subject to measures required to restore to good ecological status the bodies of surface water referred to in Article 4(iii) of Directive 2000/60/EC, or measures required to restore such bodies to high ecological status where required by law;</p>	<p>DIRECTIVE 2000/60/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a framework for Community action in the field of water policy</p>	<p>Kts. vesipuidedirektiivi yllä.</p>
	<p>- Land units subject to measures for the recreation and restoration of wetland areas, as referred to in Annex VI.B(vii) of Directive 2000/60/EC;</p>	<p>Annex VI.B(vii) of Directive 2000/60/EC establishing a framework for Community action in the field of water policy: PART B The following is a non-exclusive list of supplementary measures which Member States within</p>	<p>Suomi on jaettu kahdeksaan vesienhoitoalueeseen. Jokaiselle on laadittu vesienhoitosuunnitelma, joka on yhteenvedo Elinkeino-, liikenne- ja ympäristökeskusten omille toimialueilleen laatimista toimenpideohjelmista.</p>

		<p>each river basin district may choose to adopt as part of the programme of measures required under Article 11(4):</p> <ul style="list-style-type: none"> (i) legislative instruments (ii) administrative instruments (iii) economic or fiscal instruments (iv) negotiated environmental agreements (v) emission controls (vi) codes of good practice (vii) recreation and restoration of wetlands areas (viii) abstraction controls (ix) demand management measures, inter alia, promotion of adapted agricultural production such as low water requiring crops in areas affected by drought (x) efficiency and reuse measures, inter alia, promotion of water-efficient technologies in industry and water-saving irrigation techniques (xi) construction projects (xii) desalination plants (xiii) rehabilitation projects (xiv) artificial recharge of aquifers (xv) educational projects (xvi) research, development and demonstration projects (xvii) other relevant measures 	<p>Vuoden 2016 alussa alkoi vesienhoidon toinen kuusivuotinen suunnitelmakausi (v. 2016–2021). Suomen ympäristökeskus raportoi vesienhoidon 2. suunnittelukauden suunnitelmat EEA:lle maaliskuussa 2016.</p> <p>Paikkatietoaineisto: Vesienhoitoalueet (The River Basin District dataset). Suomessa vesipuidirektiivi on toimeenpantu keskeisiltä osin lailla vesienhoidon järjestämisestä. Suomella on neljä vesienhoitoalueita, lisäksi Ruotsin kanssa yksi vesistöalue ja Norjan kanssa kolme vesistöaluetta. Aineisto kuuluu SYKE:n avoimiin aineistoihin. Vesienhoitoalue muodostuu yhdestä tai useammasta vesistöalueesta. Aineisto on tuotettu vesistöaluerajoista, jotka on rajattu mittakaavassa 1: 50 000.</p>
	- Areas in need of ecosystem restoration so as to achieve good ecosystem condition in accordance with Regulation (EU) 2020/852 of the European Parliament of the Council ⁶ ;	Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment	Niiden alueiden seuranta, jotka ovat ennallistamistoimien tarpeessa ja ennallistettuihin saavuttaisivat toimivan ja hyväkuntoisen ekosysteemin kriteerit "taksonomia-asetuksen" mukaisesti. Taksonomia-asetus määrittelee, millaiset rahoitus- ja investointikohteet katsotaan kestäviksi, määritelmät keskeneräisiä ja työn alla.
	(d) a system for the monitoring of land use units with high climate risk :		
	- Areas subject to compensation for natural disturbances under paragraph 5 of Article 13b of Regulation (EU) 2018/841	Article 13b(5) of Regulation (EU) 2018/841 Member States shall submit evidence to the Commission concerning the impact of natural disturbances calculated pursuant to Annex VI, in order to be eligible for compensation of remaining sinks accounted for as emissions against the target of a Member State concerned set out in Annex IIa, up to the full amount of unused compensation by other Member States set out in Annex VII for the period from 2026 to 2030. In case the demand for compen-	Alueiden seuranta, joiden luonnonhäiriöistä aiheutuvat päästöt kompensoidaan, mikäli ns. luonnontuhoosääntöä päätetään käyttää. Tietoa ei vielä saatavilla, mutta paikkatietoa on tuotettava, mikäli luonnontuhoosääntöä käytetään ja seurattavia luonnonhäiriöalueita ilmenee.

		sation exceeds the amount of unused compensation available, the compensation shall be distributed proportionally among the Member States concerned.'	
	- Areas referred to in Article 5(1) of Directive 2007/60/EC	<p>Article 5(1) of Directive 2007/60/EC on the assessment and management of flood risks: On the basis of a preliminary flood risk assessment as referred to in Article 4, Member States shall, for each river basin district, or unit of management referred to in Article 3(2)(b), or portion of an international river basin district lying within their territory, identify those areas for which they conclude that potential significant flood risks exist or might be considered likely to occur.</p>	<p>Tulvadirektiivin mukaiset riskialueet. SYKE vastaa EU:n tulvadirektiivin mukaisesta raportoinnista. Direktiivin mukaiset toimenpiteet on saatu kansallisesti lainvoimaisiksi lailla (620/2010) ja sitä täydentävä valtioneuvosten asetuksella (659/2010) tulvariskien hallinnasta. SYKE on julkaissut tulvariskialueista avoimen INSPIRE-paikkatietoaineiston, joka sisältää merkittävät vesistö- ja meritulvien riskialueet (nimennyt maa- ja metsätalousministeriö) ja muut tulvariskialueet, jotka ovat ELY-keskusten tunnistamia.</p> <p>Lain mukaan ensimmäinen suunnittelukierros toteutettiin 2010–2015 ja toinen suunnittelukierros 2016–2021. Toiseen suunnittelukierrokseen liittyy kolme eri raportointia: 2019 Tulvariskien alustavat arvioinnit ja merkittävät tulvariskialueet (raportoitu 2.7.2019), 2020 Tulvakartat (raportoitu 20.3.2020) ja 2022 Tulvariskien hallintasuunnitelmat.</p>
	- Areas identified in the Member States' national adaptation strategy with high natural and man-made risks , subject to climate-related disaster risk reduction actions.		<p>Suomen kansallinen ilmastonmuutoksen sopeutumisstrategia on laadittu ensimmäisen kerran vuonna 2005. Strategiaa arvioitiin vuosina 2009 ja 2013 ja vuonna 2014 laadittiin Kansallinen ilmastonmuutoksen sopeutumis-suunnitelma, joka ulottuu vuoteen 2022. Suunnitelman toimeenpanosta tuotettiin vuonna 2019 väliarviointi. Suunnitelmaan ei suoraan liity paikkatietoaineistoja aloista, joilla esiintyy suuria luonnon ja ihmisen aiheuttamia riskejä ja joihin sovelletaan ilmastoon liittyvien katastrofiriskien vähentämistoimia, mutta viitataan esimerkiksi tulvariskiaineistoihin.</p>
	The greenhouse gas inventory shall enable the exchange and integration of data between the electronic databases and the geographic information systems.	<p>2026 lähtien</p> <ul style="list-style-type: none"> • Kaikkien hiilivarastojen päästö- ja poistumien osalta vähintään tier 2-tason menetelmä • Edellä kohdissa a–d hiilivarastojen 	<p>2030 vaatimus tier 3 -tason menetelmistä myös maataloussektorilla?</p>

	<p>For the period 2021-2025, Tier 1 methodology in accordance with the 2006 IPCC guidelines for national GHG inventories.</p> <p>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 GHGs 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, and from 2026 for all carbon pool emission and removal estimates, at least Tier 2 methodology in accordance with the 2006 IPCC guidelines for national GHG inventories.</p> <p>Member States shall from 2026 for all carbon pool emission and removal estimates falling in areas of high carbon stock land use units referred to in point (c) above, areas of land use units under protection or under restoration referred to in points (d) and (e) above, and areas of land use units under high future climate risks referred to in point (f) above, apply Tier 3 methodology, in accordance with the 2006 IPCC guidelines for national GHG inventories.'</p>	<p>päästöjen ja poistumien sekä 'avainluokkien' osalta tier 3</p>	<p>Oikeat viittaukset:</p> <p>areas of high carbon stock à point (a) areas of land use units under protection or under restoration à points (b) and (c)</p> <p>areas of land use units under high future climate risks à point (d)</p>
	<p>Alaviitteet:</p> <p>1 Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, p. 7).</p> <p>2 Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental</p>		

	<p>liability with regard to the prevention and remedying of environmental damage (OJ L 143, 30.4.2004, p. 56).</p> <p>3 Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, p. 7).</p> <p>4 Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1).</p> <p>5 Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks (OJ L 288, 6.11.2007, p. 27).</p> <p>6 Regulation (EU) 2020/852 of the European Parliament of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (OJ L 198, 22.6.2020, p. 13).</p>		
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Liite 3. Muutosehdotukset taakanjakoasetukseen

Punaisella värillä merkityt osiot ovat kirjoittajien korostamia kohtia

Regulation (EU) 2018/842	Muutosehdotus	Kommentit
<p><i>Article 1</i></p> <p>Subject matter</p> <p>This Regulation lays down obligations on Member States with respect to their minimum contributions for the period from 2021 to 2030 to fulfilling the Union’s target of reducing its greenhouse gas emissions by 30% below 2005 levels in 2030 in the sectors covered by Article 2 of this Regulation and contributes to achieving the objectives of the Paris Agreement. This Regulation also lays down rules on determining annual emission allocations and for the evaluation of Member States’ progress towards meeting their minimum contributions.</p>	<p>In Article 1, “30%” is replaced by “40%”;</p>	<ul style="list-style-type: none"> • Unionin tavoite vähentää kasvihuonekaasupäästöjä 30 prosentilla vuoteen 2005 verrattuna vuoden 2030 mennessä nousee 40 prosenttiin.
<p><i>Article 2</i></p> <p>Scope</p> <p>1. This Regulation applies to the greenhouse gas emissions from IPCC source categories of energy, industrial processes and product use, agriculture and waste as determined pursuant to Regulation (EU) No 525/2013, excluding greenhouse gas emissions from the activities listed in Annex I to Directive 2003/87/EC.</p> <p>2. Without prejudice to Article 7 and Article 9(2) of this Regulation, this Regulation does not apply to greenhouse gas emissions and removals covered by Regulation (EU) 2018/841.</p>	<p>In Article 2, paragraph 1 is replaced by the following:</p> <p>‘This Regulation applies to the greenhouse gas emissions from IPCC source categories of energy, industrial processes and product use, agriculture and waste as determined pursuant to Regulation (EU) 2018/1999 of the European Parliament and the Council*, excluding greenhouse gas emissions from the activities listed in Annex I to Directive 2003/87/EC, other than the activity “maritime transport”.</p> <p>* Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the</p>	<ul style="list-style-type: none"> • Viittaus asetukseen (EU) 525/2013 korvataan viittauksella asetukseen (EU) 2018/1999. • Asetuksen soveltamisalan määrittelyä muokataan ottaen huomioon ehdotettu meriliikenteen sisällyttäminen direktiivin 2003/87/EY liitteeseen I.

<p>3. For the purposes of this Regulation, CO₂ emissions from IPCC source category '1.A.3.A civil aviation' shall be treated as zero.</p>	<p>Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).</p>	
<p><i>Article 4</i></p> <p>Annual emission levels for the period from 2021 to 2030</p> <p>1. Each Member State shall, in 2030, limit its greenhouse gas emissions at least by the percentage set for that Member State in Annex I in relation to its greenhouse gas emissions in 2005, determined pursuant to paragraph 3 of this Article.</p> <p>2. Subject to the flexibilities provided for in Articles 5, 6 and 7 of this Regulation, to the adjustment pursuant to Article-10(2) of this Regulation and taking into account any deduction resulting from the application of Article 7 of Decision No 406/2009/EC, each Member State shall ensure that its greenhouse gas emissions in each year between 2021 and 2029 do not exceed the limit defined by a linear trajectory, starting on the average of its greenhouse gas emissions during 2016, 2017 and 2018 determined pursuant to paragraph 3 of this Article and ending in 2030 on the limit set for that Member State in Annex I to this Regulation. The linear trajectory of a Member State shall start either at five-twelfths of the distance from 2019 to 2020 or in 2020, whichever results in a lower allocation for that Member State.</p> <p>3. The Commission shall adopt implementing acts</p>	<p>In Article 4, paragraphs 2 and 3 are replaced by the following:</p> <p>'2. Subject to the flexibilities provided for in Articles 5, 6 and 7 of this Regulation and the adjustment pursuant to its Article 10(2) and taking into account any deduction resulting from the application of Article 7 of Decision No 406/2009/EC, each Member State shall ensure that its greenhouse gas emissions:</p> <p>(a) do not exceed, in the years 2021 and 2022, the limit defined by a linear trajectory, starting on the average of its greenhouse gas emissions during 2016, 2017 and 2018, as set out pursuant to paragraph 3 of this Article, and ending in 2030 at the limit set for that Member State in column 1 of Annex I to this Regulation. The linear trajectory of a Member State shall start either at five-twelfths of the distance from 2019 to 2020 or in 2020, whichever results in a lower allocation for that Member State;</p> <p>(b) do not exceed, in the years 2023, 2024 and 2025, the limit defined by a linear trajectory starting in 2022 at the annual emission allocation for that Member State, as set out pursuant to para-</p>	<ul style="list-style-type: none"> • Päivitetään puitteet, joiden mukaan komissio määrittää jäsenvaltioiden uudet vuotuiset päästötasot vuosina 2023–2030. Uusiin puitteisiin sisältyy kansallisten vuotuisten päästökiintiöiden päivittäminen käyttäen vuoden 2025 jälkeen saataville tulevia uusia tietoja. Vuonna 2025 tehtävä tarkastelu mahdollistaa vuosien 2026–2030 vuotuisten päästökiintiöiden mukauttamisen. • Vuotuiset päästötasot vuosille 2021 ja 2022 jatkaa nykyisillä säännöillä: päästöt eivät saa näinä vuosina ylittää rajaa, joka on määritelty lineaarisella kehityspolulla, joka alkaa vuosien 2016, 2017 ja 2018 päästöjen keskiarvosta ja päättyy vuonna 2030 liitteen I sarakkeessa 1 määritettyyn rajaan. Kehityspolku alkaa joko viidestä kahdestoistaosasta etäisyydestä vuodesta 2019 vuoteen 2020 tai vuodesta 2020 sen perusteella, kumpi johtaa pienempään kiintiöön kyseiselle jäsenvaltiolle. • Vuosina 2023–2025 päästöt eivät saa ylittää rajaa, joka on määritelty lineaarisella kehityspolulla, joka alkaa vuonna 2022 vuotuisesta päästökiintiöstä määritettynä kyseisen vuoden osalta tämän artiklan 3 kohdan mukaisesti ja

<p>setting out the annual emission allocations for the years from 2021 to 2030 in terms of tonnes of CO₂ equivalent as specified in paragraphs 1 and 2 of this Article. For the purposes of those implementing acts, the Commission shall carry out a comprehensive review of the most recent national inventory data for the years 2005 and 2016 to 2018 submitted by Member States pursuant to Article 7 of Regulation (EU) No 525/2013. Those implementing acts shall indicate the value for the 2005 greenhouse gas emissions of each Member State used to determine the annual emission allocations specified in paragraphs 1 and 2.</p> <p>4. Those implementing acts shall also specify, based on the percentages notified by Member States under Article 6(3), the total quantities that may be taken into account for a Member State's compliance under Article 9 between 2021 and 2030. If the sum of all Member States' total quantities were to exceed the collective total of 100 million, the total quantities for each Member State shall be reduced on a pro rata basis so that the collective total is not exceeded.</p> <p>5. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 14.</p>	<p>graph 3 of this Article for that year, and ending in 2030 at the limit set for that Member State in column 2 of Annex I to this Regulation;</p> <p>(c) do not exceed, in the years 2026 to 2030, the limit defined by a linear trajectory starting in 2024, at the average of its greenhouse gas emissions during the years 2021, 2022 and 2023, as submitted by the Member State pursuant to Article 26 of Regulation (EU) 2018/1999, and ending in 2030 at the limit set for that Member State in column 2 of Annex I to this Regulation.</p> <p>3. The Commission shall adopt implementing acts setting out the annual emission allocations for each Member State for the years from 2021 to 2030 in tonnes of CO₂ equivalent in accordance with the linear trajectories set out in paragraph 2.</p> <p>For the years 2021 and 2022, it shall determine the annual emission allocations based on a comprehensive review of the most recent national inventory data for the years 2005 and 2016 to 2018 submitted by the Member States pursuant to Article 7 of Regulation (EU) No 525/2013 and indicate the value for the 2005 greenhouse gas emissions of each Member State used to determine those annual emission allocations.</p> <p>For the years 2023, 2024 and 2025, it shall determine the annual emission allocations based on the value for the 2005 greenhouse gas emissions of each Member State indicated pursuant to the second subparagraph and the reviewed values of the</p>	<p>päätyy vuonna 2030 kyseiselle jäsenvaltiolle tämän asetuksen liitteen I sarakkeessa 2 määritettyyn rajaan.</p> <ul style="list-style-type: none"> • Vuosina 2026–2030 päästöt eivät saa ylittää rajaa, joka on määritelty lineaarisella kehityspolulla, joka alkaa vuosien 2021, 2022 ja 2023 päästöjen keskiarvosta ja päättyy vuonna 2030 liitteen I sarakkeessa 2 määritettyyn rajaan. • Alkuperäisen asetuksen mukaisesti komissio hyväksyy täytäntöönpanosäädökset, joissa vahvistetaan vuotuiset päästökaantimet vuosille 2021–2030 kehityspolkujen mukaisesti. • Vuosien 2021 ja 2022 osalta komissio määrittää vuotuiset päästökaantimet vuosia 2005 ja 2016–2018 koskevien uusimpien kansallisten inventaariotietojen perusteellisen tarkastelun pohjalta, ja ilmoittaa kunkin jäsenvaltion vuoden 2005 kasvihuonekaasupäästöille arvon, jota käytetään määrittämään kyseiset vuotuiset päästökaantimet. • Vuosien 2023–2025 osalta komissio määrittää vuotuiset päästökaantimet vuoden 2005 kasvihuonekaasupäästöjen sekä vuosia 2016, 2017 ja 2018 koskevien kansallisten inventaariotietojen tarkastettujen arvojen perusteella. • Vuosien 2026–2030 osalta komissio määrittää vuotuiset päästökaantimet vuoden 2005 kasvihuonekaasupäästöjen sekä vuosia 2021, 2022 ja 2023 koskevien uusimpien kansallisten in-
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	<p>national inventory data for the years 2016, 2017 and 2018 referred to in the second subparagraph.</p> <p>For the years 2026 to 2030, it shall determine the annual emission allocations based on the value for the 2005 greenhouse gas emissions of each Member State indicated pursuant to the second subparagraph and on a comprehensive review of the most recent national inventory data for the years 2021, 2022 and 2023 submitted by the Member States pursuant to Article 26 of Regulation (EU) 2018/1999.</p>	<p>ventaariotietojen perusteellisen tarkastelun pohjalta.</p>
<p><i>Article 6</i></p> <p>Flexibility for certain Member States following reduction of EU ETS allowances</p> <p>1. The Member States listed in Annex II to this Regulation may have a limited cancellation of up to a maximum of 100 million EU ETS allowances collectively taken into account for their compliance under this Regulation. Such cancellation shall be made from the auctioning volumes of the Member State concerned pursuant to Article 10 of Directive 2003/87/EC.</p> <p>2. The EU ETS allowances taken into account under paragraph 1 of this Article shall be considered as EU ETS allowances in circulation for the purposes of Article 1(4) of Decision (EU) 2015/1814.</p> <p>In its first review pursuant to Article 3 of that Decision, the Commission shall consider whether to maintain the accounting set out in the first subparagraph of this paragraph.</p> <p>3. The Member States listed in Annex II shall notify</p>	<p>in Article 6 the following paragraph 3a is inserted: '3a. Malta shall notify the Commission by 31 December 2023 if it intends to make use of the limited cancellation of EU ETS allowances referred to in paragraph 1, up to the percentage listed in Annex II for each of the years 2025 to 2030 for its compliance under Article 9'.</p>	<ul style="list-style-type: none"> • Maltalle asetetaan määräaika, johon mennessä sen on ilmoitettava komissiolle, aikooko se hyödyntää EU:n päästökauppajärjestelmän päästöoikeuksien rajoitettua mitätöintimahdollisuutta.

the Commission by 31 December 2019 of any intention to make use of the limited cancellation of EU ETS allowances referred to in paragraph 1 of this Article, up to the percentage listed in Annex II for each year of the period from 2021 to 2030 for each Member State concerned, for its compliance under Article 9.

The Member States listed in Annex II may decide to revise the notified percentage downwards once in 2024 and once in 2027. In such case, the Member State concerned shall notify the Commission thereof by 31 December 2024 or by 31 December 2027, respectively.

4. At a Member State's request, the Central Administrator designated pursuant to Article 20(1) of Directive 2003/87/EC ('the Central Administrator') shall take into account an amount up to the total quantity determined pursuant to Article 4(4) of this Regulation for that Member States' compliance under Article 9 of this Regulation. One-tenth of the total quantity of EU ETS allowances determined pursuant to Article 4(4) of this Regulation shall be cancelled pursuant to Article 12(4) of Directive 2003/87/EC for each year from 2021 to 2030 for that Member State.

5. Where a Member State, in accordance with paragraph 3 of this Article, has notified the Commission of its decision to revise the previously notified percentage downwards, a correspondingly lower quantity of EU ETS allowances shall be cancelled for that Member State in respect of each year from 2026 to 2030 or from 2028 to 2030, respectively.

Article 7

Additional use of up to 280 million net removals from LULUCF

1. To the extent that a Member State's greenhouse gas emissions exceed its annual emission allocations for a given year, including any annual emission allocations banked pursuant to Article 5(3) of this Regulation, a quantity up to the sum of total net removals and total net emissions from the combined **land accounting categories** of afforested land, deforested land, managed cropland, managed grassland and, subject to the delegated acts adopted pursuant to paragraph 2 of this Article, managed forest land and managed wetland, as referred to in points (a) and (b) of Article 2(1) of Regulation (EU) 2018/841, may be taken into account for its compliance under Article 9 of this Regulation for that year, provided that:

- (a) the cumulative quantity taken into account for that Member State for all the years of the period from 2021 to 2030 does not exceed the maximum amount of total net removals set out in Annex III to this Regulation for that Member State;
- (b) such quantity is in excess of that Member State's requirements under Article 4 of Regulation (EU) 2018/841;
- (c) the Member State has not acquired more net removals under Regulation (EU) 2018/841 from other Member States than it has transferred;
- (d) the Member State has complied with Regulation (EU) 2018/841; and
- (e) the Member State has submitted a description

Article 7 is amended as follows:

(a) the title is replaced by the following:
'Additional use of net removals from LULUCF'

(b) paragraph 1 is amended as follows:

(i) the introductory sentence is replaced by the following:

'To the extent that a Member State's greenhouse gas emissions exceed its annual emission allocations for a given year, including any annual emission allocations banked pursuant to Article 5(3) of this Regulation, a quantity up to the sum of total net removals and total net emissions from the combined land accounting categories included in the scope of Regulation (EU) 2018/841, may be taken into account for its compliance under Article 9 of this Regulation for that year, provided that:'.

(ii) point (a) is replaced by the following:

'(a) the cumulative quantity taken into account for that Member State for the years 2021 to 2025 does not exceed half of the maximum amount of total net removals set out in Annex III to this Regulation for that Member State;
(aa) the cumulative quantity taken into account for that Member State for the years 2026 to 2030 does not exceed half of the maximum amount of total net removals set out in Annex III to this Regulation for that Member State;'.

- Alkuperäisessä asetuksessa tilinpitoluokat on lueteltu. Tämä korvataan lauseella "asetuksen (EU) 2018/841 soveltamisalaan sisältyvistä yhdistetyistä maankäyttöön liittyvistä tilinpitoluokista".
- Alkuperäinen ajanjakso 2021–2030 LULUCF-joustopotentialisuuden käyttöön jaetaan kahteen jaksoon; 2021–2025 ja 2026–2030. Kummallakaan ajanjaksolla huomioon otettu kumulatiivinen määrä ei saa ylittää puolta tämän asetuksen liitteessä III asetetusta kokonaisnettopoistumien enimmäismäärästä.
- Poistetaan 2 kohta, koska suunniteltu liitteen III otsikon muutos toteutetaan muuttamalla taakanjakoasetusta tässä ehdotetulla tavalla.

<p>of the intended use of the flexibility available under this paragraph pursuant to the second subparagraph of Article 7(1) of Regulation (EU) No 525/2013.</p> <p>2. The Commission shall adopt delegated acts in accordance with Article 13 of this Regulation to amend the title of Annex III thereto in respect of the land accounting categories in order to:</p> <p>(a) reflect the contribution of the land accounting category managed forest land while respecting the maximum amount of total net removals for each Member State referred to in Annex III to this Regulation, when delegated acts laying down forest reference levels are adopted pursuant to Article 8(8) or (9) of Regulation (EU) 2018/841; and</p> <p>(b) reflect the contribution of the land accounting category managed wetland while respecting the maximum amount of total net removals for each Member State referred to in Annex III to this Regulation, when all Member States are required to account for this category under Regulation (EU) 2018/841.</p>	<p>(iii) paragraph 2 is deleted.</p>	
<p><i>Article 9</i></p> <p>Compliance check</p> <p>1. In 2027 and 2032, if the reviewed greenhouse gas emissions of a Member State exceed its annual emission allocation for any specific year of the period, taking into account paragraph 2 of this Article and the flexibilities used pursuant to Articles 5, 6 and 7, the following measures shall apply:</p> <p>(a) an addition to the Member State's greenhouse gas emission figure of the following year equal to</p>	<p>In Article 9, paragraph 2 is replaced by the following:</p>	<ul style="list-style-type: none"> • Ensimmäiselle jaksolle (2021–2025) jätetään nykyiset vaatimustenmukaisuuden tarkastamista koskevat säännöt, kun taas toinen ajanjakso poistetaan (2026–2030).

<p>the amount in tonnes of CO₂ equivalent of the excess greenhouse gas emissions, multiplied by a factor of 1,08, in accordance with the measures adopted pursuant to Article 12; and</p> <p>(b) the Member State shall be temporarily prohibited from transferring any part of its annual emission allocation to another Member State until it is in compliance with Article 4.</p> <p>The Central Administrator shall implement the prohibition referred to in point (b) of the first subparagraph in the Union Registry.</p> <p>2. If the greenhouse gas emissions of a Member State in either the period from 2021 to 2025 or the period from 2026 to 2030 referred to in Article 4 of Regulation (EU) 2018/841 exceeded its removals, as determined in accordance with Article 12 of that Regulation, the Central Administrator shall deduct from that Member State's annual emission allocations an amount equal to those excess greenhouse gas emissions in tonnes of CO₂ equivalent for the relevant years.</p>	<p>'2. If the greenhouse gas emissions of a Member State in the period from 2021 to 2025 referred to in Article 4 of Regulation (EU) 2018/841 exceeded its removals, as determined in accordance with Article 12 of that Regulation, the Central Administrator shall deduct from that Member State's annual emission allocations an amount equal to those excess greenhouse gas emissions in tonnes of CO₂ equivalent for the relevant years.'</p>	
	<p>The following article is inserted:</p> <p><i>'Article 11a</i> Additional reserve 1. If, by 2030, the Union has reduced net greenhouse gas emissions by at least 55% compared to 1990 levels in compliance with Article 3 of Regulation (EU) 2021/1119 of the European Parliament and of the Council**, and taking into account the maximum limit of the contribution of net removals, an additional reserve shall be established in the Union Registry.</p>	<ul style="list-style-type: none"> • Perustetaan lisävaranto, joka muodostuu mahdollisista käyttämättömistä LULUCF-hyvityksistä toisen velvoitekauden lopussa. Jäsenvaltiot voivat käyttää tätä lisävarantoa taakanjakoasetuksen mukaisen vuoden 2030 tavoitteensa täyttämiseksi edellyttäen, että EU:n 55 prosentin vähennystavoite saavutetaan. Nettopoistumien vaikutus on silloin enintään 225 miljoonaa hiilidioksidiekvivalenttitonnia. • Jäsenvaltiot voivat käyttää tätä lisävarantoa edellyttäen, että ne ovat käyttäneet kaikkia

2. Member States which decide to neither contribute nor benefit from the additional reserve shall **notify their decision to the Commission no later than six months after the entry into force of this Regulation.**

3. The additional reserve shall consist of the net removals that participating Member States have generated in the period **2026 to 2030 in excess of their respective targets** pursuant to Regulation (EU) 2018/841, after deduction of both of the following:

(a) any flexibilities used under Articles 11 to 13b of Regulation (EU) 2018/841;

(b) the quantities taken into account for compliance pursuant to Article 7 of this Regulation.

4. If an additional reserve is set up pursuant to paragraph 1, a participating Member State may benefit from it if the following conditions are fulfilled:

(a) the greenhouse gas emissions of the Member State exceed its annual emission allocations in the period from 2026 to 2030;

(b) the Member State has exhausted the flexibilities pursuant to Article 5(2) and (3);

(c) the Member State has made the maximum use possible of net removals in accordance with Article 7, even if that quantity does not reach the level set in Annex III; and

(d) the Member State has made no net transfers to other Member States under Article 5.

5. If a Member States fulfils the conditions set out in paragraph 4, **it shall receive an additional quantity from the additional reserve up to its shortfall** to be used for compliance under Article 9.

muita joustomahdollisuuksia. Jos kaikkien asetetut edellytykset täyttävien jäsenvaltioiden saama yhteenlaskettu määrä ylittää lisävarantoon kohdennetun määrän, kaikkien näiden yksittäisten jäsenvaltioiden saamaa määrää vähennetään suhteutetusti.

If the resulting collective quantity to be received by all of the Member States which fulfil the conditions set out in paragraph 4 of this Article exceeds the quantity allocated to the additional reserve under paragraph 3 of this Article, the quantity to be received by each of those Member States shall be reduced on a **pro rata basis**.

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

ANNEX I
MEMBER STATE GREENHOUSE GAS EMISSION REDUCTIONS PURSUANT TO ARTICLE 4(1)

	Member State greenhouse gas emission reductions in 2030 in relation to their 2005 levels determined in accordance with Article 4(3)
Belgium	- 35 %
Bulgaria	- 0 %
Czechia	- 14 %
Denmark	- 39 %
Germany	- 38 %
Estonia	- 13 %
Ireland	- 30 %
Greece	- 16 %
Spain	- 26 %
France	- 37 %
Croatia	- 7 %
Italy	- 33 %

Annex I to Regulation (EU) 2018/842 is replaced by the text in the Annex to this Regulation;

MEMBER STATE GREENHOUSE GAS EMISSION REDUCTIONS PURSUANT TO ARTICLE 4(1)

	Member State greenhouse gas emission reductions in 2030 in relation to their 2005 levels determined in accordance with Article 4(3)	
	Column 1	Column 2
Belgium	- 35 %	- 47 %
Bulgaria	- 0 %	- 10 %
Czechia	- 14 %	- 26 %
Denmark	- 39 %	- 50 %
Germany	- 38 %	- 50 %
Estonia	- 13 %	- 24 %
Ireland	- 30 %	- 42 %
Greece	- 16 %	- 22.7 %
Spain	- 26 %	- 37.7 %
France	- 37 %	- 47.5 %

- Sarake 1 vastaa alkuperäisen asetuksen saraketta, mutta sovelletaan uuden ehdotuksen mukaisesti vain vuosille 2021 ja 2022.
- Sarake 2 on uusi tälle asetusehdotukselle ja sovelletaan vuosille 2023–2030.

Cyprus	- 24 %
Latvia	- 6 %
Lithuania	- 9 %
Luxembourg	- 40 %
Hungary	- 7 %
Malta	- 19 %
Netherlands	- 36 %
Austria	- 36 %
Poland	- 7 %
Portugal	- 17 %
Romania	- 2 %
Slovenia	- 15 %
Slovakia	- 12 %
Finland	- 39 %
Sweden	- 40 %
United Kingdom	- 37 %

Croatia	- 7 %	- 16.7 %
Italy	- 33 %	- 43.7 %
Cyprus	- 24 %	- 32 %
Latvia	- 6 %	- 17 %
Lithuania	- 9 %	- 21 %
Luxembourg	- 40 %	- 50 %
Hungary	- 7 %	- 18.7 %
Malta	- 19 %	- 19 %
Netherlands	- 36 %	- 48 %
Austria	- 36 %	- 48 %
Poland	- 7 %	- 17.7 %
Portugal	- 17 %	- 28.7 %
Romania	- 2 %	- 12.7 %
Slovenia	- 15 %	- 27 %
Slovakia	- 12 %	- 22.7 %
Finland	- 39 %	- 50 %
Sweden	- 40 %	- 50 %

ANNEX II

MEMBER STATES THAT MAY HAVE A LIMITED CANCELLATION OF EU ETS ALLOWANCES TAKEN INTO ACCOUNT FOR COMPLIANCE PURSUANT TO ARTICLE 6

	Maximum percentage of 2005 greenhouse gas emissions determined in accordance with Article 4(3)
Belgium	2 %
Denmark	2 %
Ireland	4 %
Luxembourg	4 %

In Annex II the entry for Malta is replaced by the following:

	Maximum percentage of 2005 greenhouse gas emissions determined in accordance with Article 4(3)
"Malta	7%"

- Nostetaan Maltaa koskeva päästökauppa-järjestelmän joustoraja 2 prosentista 7 prosenttiin.

Malta	2%		
Netherlands	2 %		
Austria	2 %		
Finland	2 %		
Sweden	2 %		
ANNEX III TOTAL NET REMOVALS FROM AFFORESTED LAND, DEFORESTED LAND, MANAGED CROPLAND AND MANAGED GRASSLAND THAT MEMBER STATES MAY TAKE INTO ACCOUNT FOR COMPLIANCE FOR THE PERIOD 2021 TO 2030 PURSUANT TO POINT (A) OF ARTICLE 7(1)		The title of Annex III is replaced by the following: 'TOTAL NET REMOVALS FROM THE CATEGORIES OF LAND COVERED BY REGULATION (EU) 2018/841 THAT MEMBER STATES MAY TAKE INTO ACCOUNT FOR COMPLIANCE FOR THE PERIOD 2021 TO 2030 PURSUANT TO POINT (a) OF ARTICLE 7(1) OF THIS REGULATION'	<ul style="list-style-type: none"> • Muutetaan liitteen otsikko 7 artiklan uuden tekstin mukaisesti.
	Maximum amount expressed in million tonnes of CO 2 equivalent		
Belgium	3,8		
Bulgaria	4,1		
Czechia	2,6		
Denmark	14,6		
Germany	22,3		
Estonia	0,9		
Ireland	26,8		
Greece	6,7		
Spain	29,1		
France	58,2		
Croatia	0,9		
Italy	11,5		
Cyprus	0,6		
Latvia	3,1		
Lithuania	6,5		
Luxembourg	0,25		
Hungary	2,1		

Malta	0,03		
Netherlands	13,4		
Austria	2,5		
Poland	21,7		
Portugal	5,2		
Romania	13,5		
Slovenia	1,3		
Slovakia	1,2		
Finland	4,5		
Sweden	4,9		
United Kingdom	17,8		
Maximum total:	280		

Liite 4. CRF-taulukko 4.1

EUC vuonna 2018, inventaarion lähetysvuosi 2020.

**Table 4.1 LAND TRANSITION
MATRIX**

Areas and changes in areas between the previous and the current inventory year⁽¹⁾

Inventory 2018
Submission 2020 v2
EUROPEAN UNION
(KP)

TO:	Forest land (managed)	Forest land (unmanaged)	Cropland	Grassland (managed)	Grassland (unmanaged)	Wetlands (managed)	Wetlands (unmanaged)	Settlements	Other land	Total unmanaged land	Initial area
FROM:	(kha)										
Forest land (managed) ⁽²⁾	164343,78	NA,NO	40,70	47,14	IE,NA,NO	3,83	20,15	74,10	16,95	IE,NA,NO	164546,64
Forest land (unmanaged) ⁽²⁾	NA,NO	2185,71	0,00	0,01	NA,NO	NA,NO	NA,NO	0,07	0,06	IE,NA,NO	2185,85
Cropland ⁽²⁾	30,14	NA,NO	124264,52	496,00	IE,NA,NO	2,84	9,08	114,01	2,11	IE,NA,NO	124918,70
Grassland (managed) ⁽²⁾	173,57	3,96	437,25	92741,54	5,14	19,22	8,00	120,80	12,33	IE,NA,NO	93521,81
Grassland (unmanaged) ⁽²⁾	0,24	NA,NO	0,14	2,98	394,90	IE,NA,NO	IE,NA,NO	0,00	0,01	IE,NA,NO	398,27
Wetlands (managed) ⁽²⁾	4,45	NA,NO	1,68	12,31	IE,NA,NO	7902,10	4,70	3,31	0,79	IE,NA,NO	7929,34
Wetlands (unmanaged) ⁽²⁾	21,78	IE,NA,NO	4,31	3,35	IE,NA,NO	0,26	17311,38	1,11	6,93	IE,NA,NO	17349,12
Settlements ⁽²⁾	8,56	NA,NO	27,35	48,89	IE,NA,NO	3,95	0,85	30511,21	11,55	IE,NA,NO	30612,35
Other land ⁽²⁾	17,43	NA,NO	3,48	13,85	NA,NO	0,59	13,96	1,47	17741,43	IE,NA,NO	17792,22
Total unmanaged land ⁽³⁾	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	IE,NA,NO	322,47	322,47
Final area	164599,95	2189,67	124779,44	93366,07	400,04	7932,81	17368,11	30826,08	17792,15	322,47	459576,77
Net change⁽⁴⁾	53,31	3,82	-139,26	-155,74	1,77	3,47	18,99	213,73	-0,07	0,00	0,00

⁽¹⁾ For Parties using reporting approach 1 to represent land areas, only data on the initial and final area per land use should be filled in. Notation key "NA" (not applicable) should be used in such cases for the specific land use transitions, allowing for the formulas in the cells for final and initial areas to be overwritten. Coastal wetlands areas which are not part of total land area should not be included in this land matrix.

⁽²⁾ Definitions for the respective land use categories used by the Party should be provided in the NIR, in accordance with the definitions of land use categories in Volume 4, chapter 3, section 3.2 of the 2006 IPCC Guidelines.

⁽³⁾ Parties may report only the total area of unmanaged land area and enter the notation key IE under the individual unmanaged land uses categories.

⁽⁴⁾ Net change is the final area minus the initial area for each of the conversion categories shown at the head of the corresponding row. In the final area row the net change equals zero.

Liite 5. EU:n referenssiskenaario 2020

Referenssiskenaarion kuvaus

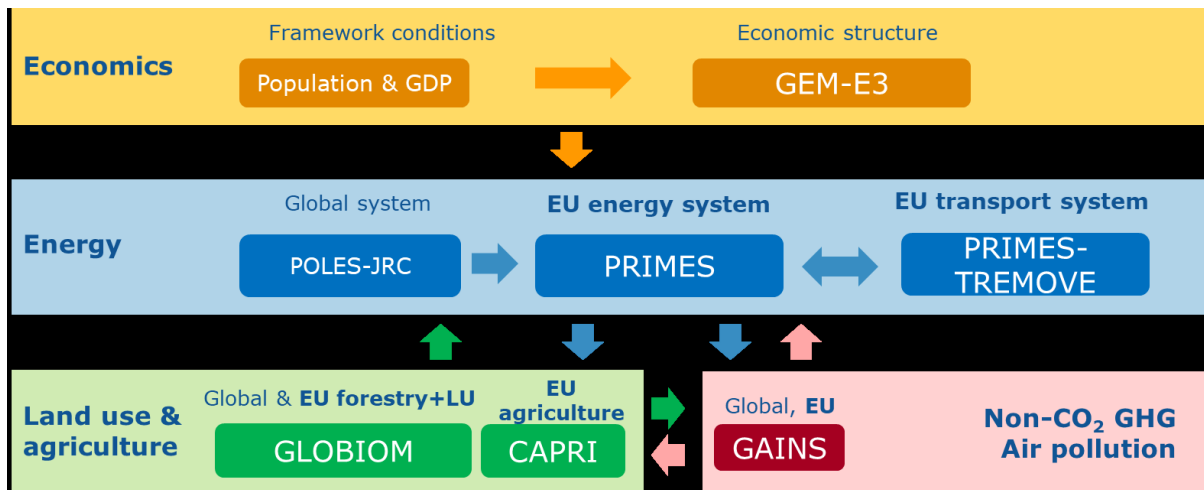
Yleisesti EU:n referenssiskenaario 2020 (Euroopan komissio 2021) kuvaa projektia EU:n energiajärjestelmän, liikennejärjestelmän ja kasvihuonekaasupäästöjen kehityksestä. Se ei ennusta, miltä ne näyttävät tulevaisuudessa, vaan se tarjoaa mallipohjaisen simuloinnin mahdollisista tulevaisuuden näkymistä. Projektiossa otetaan huomioon nykyinen toimintaympäristö, joka perustuu tiettyihin reunaehtoihin, oletuksiin ja historiapohjaisiin trendeihin (erityisesti energiajärjestelmää, liikennettä ja kasvihuonekaasupäästöjä koskevista tilastotiedoista). Projekti pohjautuu jäsenmaiden vuoden 2019 loppuun mennessä toimittamiin kansallisiin energia- ja ilmastosuunnitelmiin (NECP) sekä muihin kansallisiin suunnitelmiin. EU:n referenssiskenaarion laadintaa kunkin jäsenmaan osalta ohjasi jäsenmaan toimittama kansallinen WAM-skenaario tai, jos jäsenmaan toimittama WAM-skenaario puuttui, jäsenmaan toimittama kansallinen WEM-skenaario.

LULUCF-sektorin osalta referenssiskenaariossa mallinnetaan BAU (business as usual) -kehitysuran mukaista polkua, joissa huomioidaan metsien hakkuut ja maankäytössä tapahtuvat muutokset tarkastelujakson (vuosien 2000–2050) aikana. Erikoistapauksissa referenssiskenaariossa voidaan huomioida myös suuret häiriöt (esim. tuhot ja metsäpalot), jotka vaikuttavat LULUCF-sektorin nieluihin.

Referenssiskenaariossa käytetyt mallit

Referenssiskenaarion projektiot tehdään energia- ja kasvihuonekaasujärjestelmän laskennallisten mallien avulla. Malleissa käytetään yksityiskohtaisia ja ajantasaisia tietokantoja sektori-kohtaisten ja maakohtaisten ennusteiden laatimiseksi. Kalibrointi takaa jatkuvuuden historiapohjaisten tilastojen ja laadittavien projektioiden välillä. Mallit noudattavat mikrotaloustieteeseen perustuvaa lähestymistapaa, ratkaisevat hintavetoisen markkinatasapainon ja integroivat teknologiset ja taloudelliset tulostiedot kaikille toimialoille.

Referenssiskenaariossa kasvihuonekaasupäästöjen projektiot syntyvät useiden mallien vuorovaikutuksen tuloksena kattamalla kaikki talouden alat, päästölähteet ja päästöjen vähennysvaihtoehdot. Projektiot alkavat vuodesta 2020, kun taas vuosien 2010 ja 2015 osalta kehitys kalibroidaan erilaisiin tilastoihin pohjautuen. Kaikkia malleja voidaan käyttää erillisinä alakohdittaisina malleina tai mallit voidaan liittää toisiinsa, jotta saadaan täydellinen kuvaus EU:n talouden ja energiajärjestelmän kasvihuonekaasupäästöistä. Kuvassa L5_1 esitetään yhteenveto eri mallien välisistä vuorovaikutuksista referenssiskenaarion valmistelussa.



Kuva L5_1. EU:n referenssiskenaarion 2020 laadinnassa käytetyt mallit (Lähde: Euroopan komissio 2021).

LULUCF-sektorin osalta kasvihuonekaasupäästöjen kehityksen mallinnus perustuu GLOBIOM-malliin, jolla mallinnetaan lähinnä hiilidioksidipäästöjä tai hiilensidontaa maaperän ja biomasan osalta viljelysmailla (*croplands*) ja ruohikkoalueilla (*grasslands*), ja G4M-malliin, jolla arvioidaan metsien (*forest land*) päästöjä (koskien metsänhoitoa, metsitystä ja metsäkatoa). Maatalouden osalta kasvihuonekaasupäästöt mallinnetaan lukuisia maita koskevalla maataloussektorin CAPRI-mallilla, jossa huomioidaan yhteistä maatalouspolitiikkaa ja ympäristöpolitiikkaa koskeva päätöksenteko. EU:n maataloussektorin osalta GLOBIOM-mallinnus on yhteydessä CAPRI-mallinnukseen, jolla varmistetaan ennusteiden johdonmukaisuus referenssiskenaarion laadinnassa. GAINS-mallilla laaditaan projektiot ilmansaasteiden ja muiden kasvihuonekaasujen kuin hiilidioksidin päästöjen vähentämisstrategioista ja niihin liittyvistä kustannuksista.

Projektioiden oletukset ja lähtötiedot LULUCF- ja maataloussektorien osalta

LULUCF-sektorin osalta referenssiskenaario perustuu tuoreimpiin käytettävissä oleviin aineistoihin, ja mallinnusprojektiioihin. Tietolähteitä ovat FAO:n maailmanlaajuiset maa- ja metsätaloustuotteiden tuotannon ja kaupan (FAOSTAT, <https://www.fao.org/faostat/>) ja metsävarojen inventoinnin (FAO-FRA, <https://www.fao.org/forest-resources-assessment/>) tilastot ja aineistot. Mallinnusprojektiot pohjautuvat PRIMES-mallilla tehtyihin bioenergian kysynnän projektiioihin (biopolttoaineiden ja kiinteän biomassan energiakäyttö) ja GEM-E3-mallilla laadittuihin makrotaloudellisiin projektiioihin (mm. väestön ja bruttokansantuotteen kehitysenusteiden huomiointi GLOBIOM-mallissa).

G4M-mallissa metsien hakkuupoistumatiedot on kalibroitu FAOSTATin tilastotietoihin (ladattu maaliskuussa 2020) tai poikkeustapauksissa jäsenvaltioiden yksittäisiin tietoihin. Metsitys- ja metsänkatoprosentit on kalibroitu kasvihuonekaasuinventaarion 2020 tietoihin (UNFCCC 2020a). Vuodesta 1960 lähtien tiedot toteutuneista hakkuukertymistä perustuvat FAOSTATin tilastoihin, joita on käytetty laskettaessa puutuotteiden nieluja.

Maatalousmarkkinoiden taseet, pinta-alat ja hinnat on kalibroitu Eurostatin tilastoihin (https://ec.europa.eu/info/departments/eurostat-european-statistics_fi) CAPRI-tietokannan perusteella, ja ne ovat linjassa viimeisimpien FAOSTAT-tilastotietojen kanssa.

Kasvihuonekaasuinventaarion 2020 tietoja (UNFCCC 2020a) käytettiin mallitulosten jälkikäteiseen kalibrointiin, jolla varmistettaisiin tulosten yhdenmukaisuus YK:n ilmastopöytäkirjalle raportoitujen kasvihuonekaasupäästötietojen kanssa. Rakennetun maan tuleva kehitys perustui projektioissa kasvihuonekaasuinventaarion 2020 (UNFCCC 2020a) mukaiseen historialliseen aikasarjaan vuosilta 2008–2018. GLOBIOM-G4M-mallinnuksen pinta-alatase yhdenmukaistettiin vuonna 2020 raportoitujen kasvihuonekaasuinventaarion tietojen (UNFCCC 2020a) kanssa johdonmukaisuuden parantamiseksi (ts. luonnontilaiset ruohikot erotettiin hoitamattomasta maasta ja sisällytettiin viljelysmaihin yhdessä laidunten kanssa). Kosteikkojen päästöjä ei mallinnettu, vaan niiden oletettiin pysyvän vakiosuuruisena vuoden 2018 tasolla kasvihuonekaasuinventaarion 2020 (UNFCCC 2020a) tietoihin perustuen. Projektoiden mallinnusta laajennettiin jälkikäteen kalibroinnissa koskemaan LULUCF-sektorin osalta myös muiden kasvihuonekaasujen kuin hiilidioksidin päästöjä.

GAINS-malli kattaa karjajärjestelmien, maatalousmaiden ja maatalousjätteiden polttamisen CH₄- ja N₂O-päästöt. Eläinten lukumäärää koskevat historiatiedot on päivitetty vastaamaan Eurostatille vuonna 2019 ilmoitettuja kansallisia tilastoja. Eläinten lukumääriä ja maitotuottoa koskevat projektiot on mukautettu CAPRI-mallin arvioimaan trendiin.

Karjaa koskevia implisiittiset metaanikaasun päästökertoimet (päästöt eläintä kohti) kalibroitiin päästötietoihin, jotka maat raportoivat vuoden 2019 kasvihuonekaasuinventaariossa (UNFCCC 2019) vuodelle 2015. Teknologian ja lannan hallintajärjestelmän osalta vuoden 2015 implisiittiset päästökertoimet pysyvät projektioissa vakioina tulevina vuosina.

Projektoiden viitekehys

LULUCF-sektorin osalta EU:n referenssiskenaarion projektiossa laadinnassa viitekehystenä toimii LULUCF-asetus (EU) 2018/841. Komissio muutti lokakuussa 2020 asetuksen liitettä IV delegoidulla säädöksellä, jossa säädetään metsien vertailutasoista, joita kunkin maan on sovellettava vuosina 2021–2025. Metsien vertailutasot ovat tulevaisuuteen suuntautuvia vertailuarvoja kunkin EU-jäsenmaan nykyisten metsien nettopäästöjen kirjanpidossa. Ne perustuvat vuosien 2000–2009 aikaisten kestävien metsänhoitokäytäntöjen jatkumiseen. Nämä vertailutasot sisältävät parhaan käytettävissä olevan tiedon (ml. metsien dynaamisen ikäluokkarakenteen kuvauksen).

Maataloussektorilla CAPRI-mallinnuksen projektio EU:n referenssiskenaarion laadinnassa pohjautuu EU:n maatalousmarkkinoiden ja -tulojen tulevaisuudennäkymiin keskipitkällä aikavälillä (EU Agricultural Outlook for markets, income, and environment, 2020–2030/Euroopan komissio 2020). Suuri osa maatalouteen vaikuttavasta lainsäädännöstä vaikuttaa ennustettuun toimintaan. Yhteisen maatalouspolitiikan (CAP) uudistuksesta vuosille 2021–2027 sovitettiin 29. kesäkuuta 2021 Euroopan parlamentin ja EU:n neuvoston kesken. Uusi CAP sisältää useita muutoksia suorien tukien järjestelmään, jotka on sisällytetty CAPRI-malliin. Maatalouspolitiikat, joilla pyritään parantamaan lannoitteiden käyttöä tai joilla on vaikutusta eläinten tuottavuuteen ja tilojen määrään, huomioidaan CAPRI-mallin parametreissa, joiden kautta ohjataan typen käytön tehokkuutta. Vaikka typen käytön tehokkuus paranee yleisesti, CAPRI:n ennusteisiin ei sisälly Pellolta pöytään -strategia -tiedonannossa (COM/2020 381 final) asetettuja erityistavoitteita, esimerkiksi luonnonmukaisen viljelyn osuutta 25 prosenttia, lannoitteiden käytön vähentämistä 20 prosentilla ja ravinnehävikin vähentämistä 50 prosentilla.

CAPRI:n ennusteet eivät myöskään sisällä kehitteillä olevien CAP:in strategisten suunnitelmien vaikutusta. Vaatimukset pysyvän nurmen muuntamisen estämiseksi muuhun maankäyttöön pantiin suoraan täytäntöön. Nämä muutokset ennustetuissa toimintojen tasoissa (karjakoost ja mineraalilannoitteiden kulutus) vaikuttivat suoraan muiden kasvihuonekaasujen kuin hiilidioksidin päästöarvioihin GAINS-mallin ennusteissa, jossa hyödynnettiin CAPRI-mallinnuksen tuottamia tietoja eri toimintojen tasoista maataloussektorilla.

Metsien kehitys ja hyödyntäminen EU:n alueella

EU:n referenssiskenaariossa metsien vuotuisten hakkuiden oletetaan nousevan EU-alueella vuoden 2015 tasosta 512 miljoonaa kuutiometriä tasolle 575 miljoonaa kuutiometriä vuonna 2030 ja edelleen tasolle 583 miljoonaa kuutiometriä vuonna 2050. Vuoteen 2030 saakka metsien hakkuiden lisäys johtuu pääosin puupohjaisen biomassan kysynnän kasvusta, mutta vuoden 2030 jälkeen energiantuotantoon tarvittavan puuraaka-aineen kysyntä pienenee hieman. Energiantuotantoon korjattavan puun osuus kokonaishakkuukertymästä on 31 prosenttia vuonna 2015, 35 prosenttia vuonna 2030 ja 32 prosenttia vuonna 2050. Lyhytkiertoisesta metsätalouden oletetaan tarjoavan energiantuotantoon biomassaa 1,8 miljoonaa kuutiometriä vuonna 2030 ja 10 miljoonaa kuutiometriä vuonna 2050.

Puuntuotannossa olevalla maalla metsien vuotuisen keskikasvun oletetaan pienenevän hietaasti 5,6 kuutiometrillä hehtaarilla vuonna 2015 5,4 kuutiometriin hehtaarilla vuonna 2050, mutta vastaavalla ajanjaksolla metsien vuotuinen kokonaiskasvu EU-alueella nousee 743 miljoonasta kuutiometrillä 760 miljoonaan kuutiometriin. Syynä metsien keskikasvun lievään alenemiseen on vanhojen metsien suurempi osuus ikäluokkarakenteessa. Tästä huolimatta metsien kokonaiskasvu lisääntyy metsityksen ansiosta.

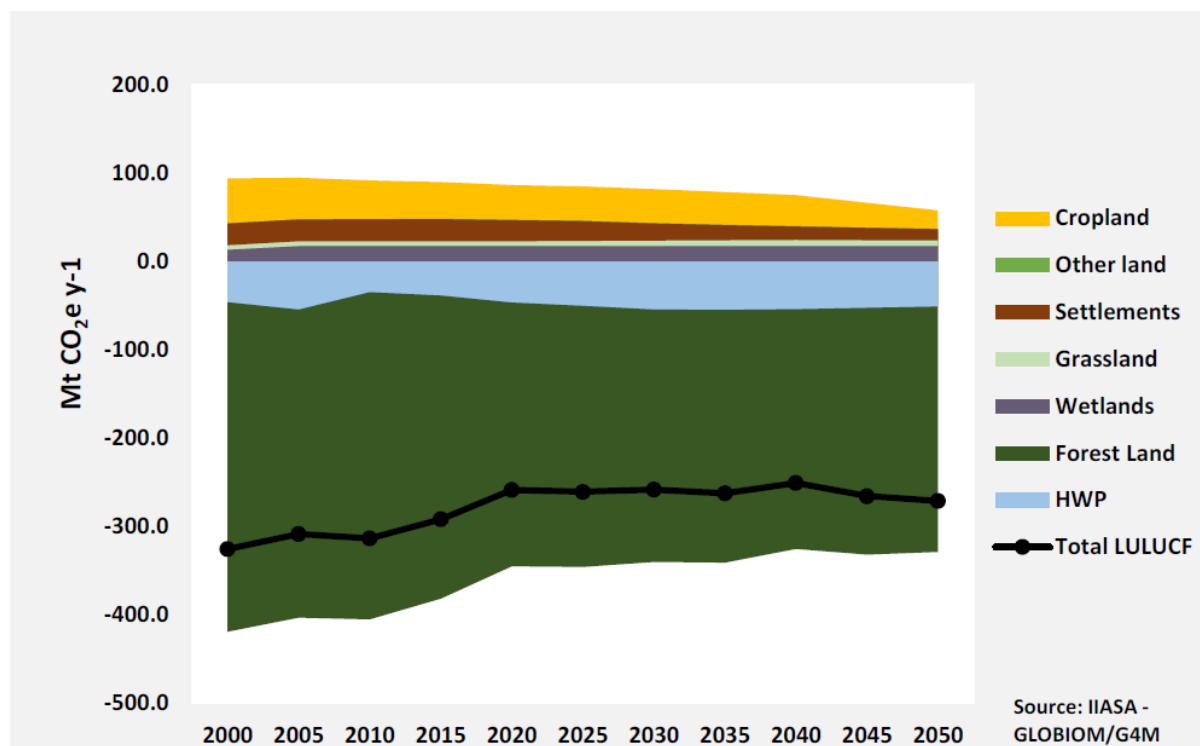
Metsitys EU-alueella pienenee vuoden 2015 tasosta 8,5 miljoonaa hehtaaria aluksi 5,7 miljoonaan hehtaariin vuonna 2030 ja tämän jälkeen hieman yli 5 miljoonaan hehtaariin vuonna 2050, minkä vuoksi metsityksen vaikutus hiilinieluihin pienenee ajanjaksolla 2015–2050. Metsämaan kokonaisala on 155 miljoonaa hehtaaria vuonna 2015 ja se nousee vähitellen 160 miljoonaan hehtaariin vuoteen 2050 mennessä. Puuston ikääntyessä, uudet istutukset alkavat tuottaa biomassaa energian tuotantoa varten. Uudet istutusmetsät vähentävät paineita hakkuisiin vanhoissa metsissä ja siten helpottavat hiilivarastojen ylläpitämistä olemassa olevissa hoidetuissa metsissä.

LULUCF-sektorin päästöt ja poistumat EU-alueella

EU-alueella LULUCF-sektori on tällä hetkellä nettohiilinielu, sillä se sitoo enemmän hiiltä kuin päästää. LULUCF-nielu (mukaan lukien puutuotteet ja muiden kasvihuonekaasujen kuin hiilidioksidin päästöt) on ollut vuosina 2000–2010 yli 300 miljoonaa hiilidioksidiekvivalenttitonnia, mutta viime vuosina LULUCF-nielu on hieman pienentynyt raportoitujen kasvihuonekaasuinventaariotietojen (UNFCCC 2020a) mukaan. Koska GLOBIOM-G4M-mallinnuksessa ei ole mahdollista sovittaa yhteen yksittäisten vuosien tietoja, vuosien keskiarvotiedot ja trendit on sovitettu projektoiden laadinnassa yhteen. Yksittäisten vuosien erot liittyvät mallien ja tietoaineistojen epävarmuustekijöihin sekä erilaisiin mallintamismenetelmiin ja raportoinnissa sovellettaviin lähestymistapoihin.

Koko EU-alueella LULUCF-sektorin nettohiilinielun odotetaan säilyvän vuoteen 2050 asti, vaikka sen ennustetaan vähenevän hieman voimakkaammin lyhyellä aikavälillä. EU:n referenssiskenaariossa LULUCF-nielut ovat 292 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2015, 258 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2030 ja 271 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2050.

ekvivalenttitonnia vuonna 2050, mitkä vastaavat vuosien 2030 ja 2050 osalta noin 12 prosentin ja 7 prosentin pienennyksiä LULUCF-nieluissa vuoden 2015 tasoon nähden. Nielujen vähennykset johtuvat erilaisista maankäytössä tapahtuvissa muutoksista, joista metsien (*forest land*) käytössä tapahtuvat muutokset ovat tärkeimpiä. Kuvassa L5_2 esitetään LULUCF-sektorin kasvihuonekaasupäästöt/-poistumat EU-alueella vuoteen 2050 asti maankäyttöluokittain.



Kuva L5_2. LULUCF-sektorin nettopäästöt/-poistumat (milj. t CO₂-ekv./v) maankäyttöluokittain EU-alueella vuosina 2000–2050 EU:n referenssiskenaarion 2020 mukaan (Lähde: Euroopan komissio 2021).

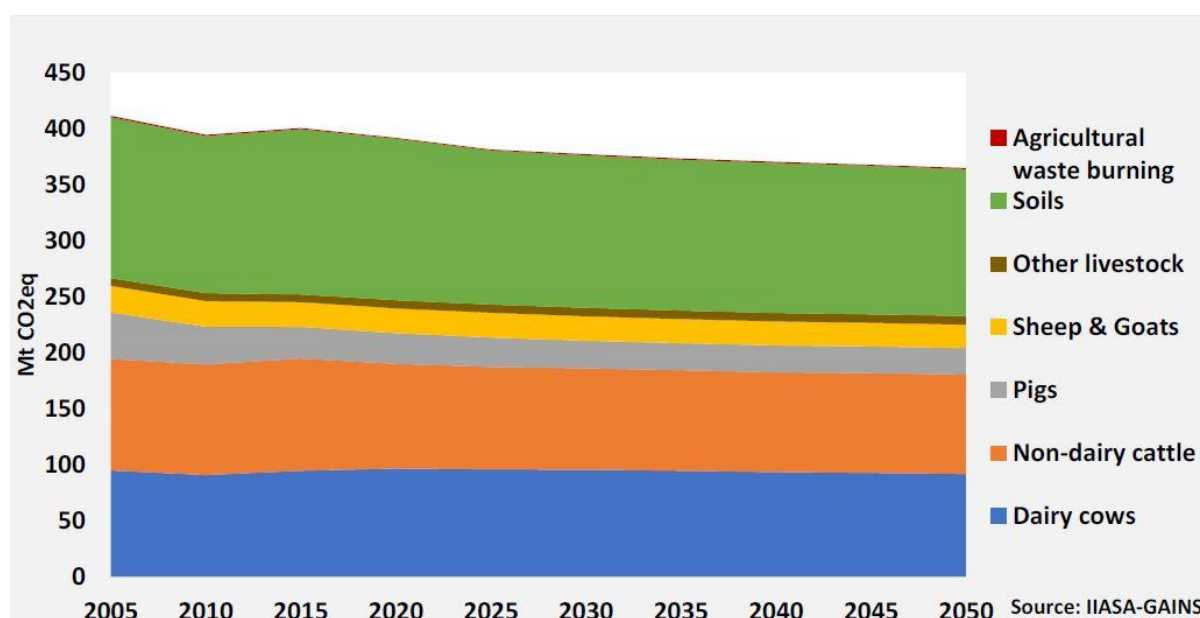
Hoidetun metsämaan hiilinielu pienentyy EU-alueella vuoden 2015 tasosta 343 miljoonaa hiilidioksidiekvivalenttitonnia tasolle 286 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2030 ja edelleen 278 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2050, koska metsien hakkuut kasvavat tasaisesti aina vuoteen 2040 asti vakiintuen sen jälkeen. Puutuotteiden hiilinielun oletetaan kasvavan ajan mittaan ja olevan huipussaan vuonna 2030, jonka jälkeen puutuotteiden hiilinielu laskee hieman alemmalle tasolle. EU-jäsenvaltioiden yhteenlaskettu puutuotteiden hiilinielu on 38 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2015, 54 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2030 ja 51 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2050.

Maataloussektorin päästöt ja poistumat EU-alueella

Maataloussektorilla muiden kasvihuonekaasujen kuin hiilidioksidin päästöt olivat EU-alueella yli 410 miljoonaa hiilidioksidiekvivalenttitonnia vuonna 2005 (kuva L5_3). Maataloussektorin päästövähennykset vuodesta 2005 vuoteen 2015 ovat olleet vain 5 prosenttia. EU:n referenssiskenaarion projektion mukaan myös lähitulevaisuudessa on odotettavissa vaatimattomia päästövähennyksiä, sillä muiden kasvihuonekaasujen kuin hiilidioksidin päästöt vähentyvät

vuoden 2005 tasosta vain 8 prosenttia vuoteen 2030 mennessä ja 11 prosenttia vuoteen 2050 mennessä.

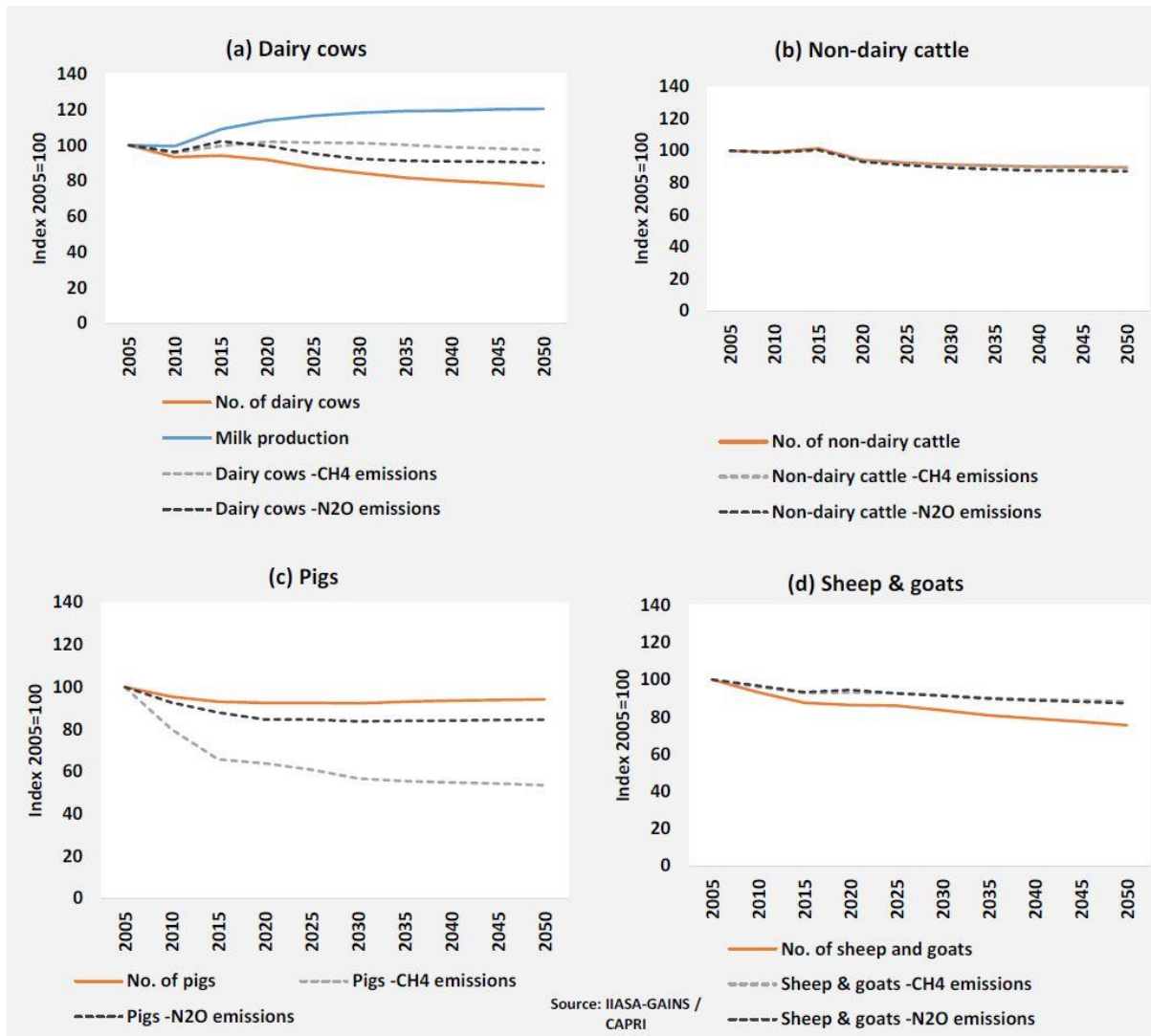
Tuotantoeläimet ovat EU-alueella merkittävin päästölähde maataloussektorilla muiden kasvihuonekaasujen kuin hiilidioksidin osalta. Yli kolme neljäsosaa tuotantoeläinten päästöistä on peräisin lypsylehmistä ja muusta karjasta, mihin vaikuttavat ensi sijassa märehtijöiden ruoansulatuksen yhteydessä vapautuvat metaanipäästöt (CH₄) sekä vähemmässä määrin lannankäsittelystä syntyvät metaani- ja dityppioksidipäästöt (CH₄ ja N₂O). Hieman yli kolmannes maatalouden päästöistä on maaperän dityppioksidipäästöjä, mikä johtuu lähinnä lannoitteista ja niihin lisätyn typen määrästä. Typpipäästöjen hillitsemiseksi toteutetut politiikat, esimerkiksi EU:n nitraattidirektiivi, tarjoavat jatkuvia kannustimia kivennäislannoitteiden käytön vähentämiseksi, ja niiden odotetaan vähentävän maaperän dityppioksidipäästöjä 8 prosenttia vuosina 2015–2030. Hyvin pieni osuus metaanipäästöistä aiheutuu lisäksi sadonkorjuujätteiden polttamisesta pelloilla.



Kuva L5_3. Maataloussektorin nettopäästöt (milj. t CO₂-ekv./v) päästölähteittäin muiden kasvihuonekaasujen kuin hiilidioksidin osalta EU-alueella vuosina 2000–2050 EU:n referenssiskenaariota 2020 mukaan (Lähde: Euroopan komissio 2021).

GAINS-mallinnuksessa karjan päästöjen tulevaa kehitystä ohjaavat tuotantoeläinten määrät ja maidontuotanto lypsylehmien osalta. Päästöihin vaikuttavat teknologiat ja käytännöt, joilla pyritään vähentämään muiden kasvihuonekaasujen kuin hiilidioksidin kokonaispäästöjä. Kuvassa L5_4 a näkyy, kuinka EU-alueella lypsylehmäkannan odotetaan supistuvan 10 prosenttia vuosien 2015 ja 2030 välillä, mutta maitotuotannon samanaikaisen kasvun vuoksi metaanipäästöt (CH₄) laskevat samalla ajanjaksolla vain 1,6 prosenttia. Lihakarjan (kuva L5_4 b) metaani- ja dityppioksidipäästöjen (CH₄ ja N₂O) odotetaan seuraavan tarkasti eläinkannan vähenemistä noin 10 prosentilla vuosien 2015 ja 2030 välillä. Sikojen määrässä (kuva L5_4 c) ei ennakoita laskua vuosien 2015 ja 2030 välillä, joten sikaeläinten dityppioksidipäästöjen (N₂O) väheneminen on vain vähäistä. Sikaeläinten metaanipäästöt (CH₄) ovat vähentyneet 12 prosenttia vuosina 2005–2015, koska lannan anaerobisten mädätyslaitteiden määrä on maataloilla lisääntynyt. Nämä laitteistot toimivat biokaasun lähteenä sekä keinoina vähentää lantamääriä ja hajuhaittoja. PRIMES-mallin perusteella, uusiutuvan energian järjestelmien kysyn-

tä kasvaa myös jatkossa, mikä johtaa sikatuotannossa metaanipäästöjen vähentymiseen 14 prosentilla vuosien 2015 ja 2030 välillä. EU-alueella lampaiden ja vuohien (kuva L5_4 d) metaani- ja dityppioksidikaasujen (CH₄ ja N₂O) kokonaispäästöt noudattavat tarkasti eläinten määrän ennustettua laskua.



Kuva L5_4. Tuotantoeläinten (a: lypsykarja, b: lihakarja, c: siat ja d: lampaat ja vuohet) lukumäärien sekä eläinten tuottamien metaani- (CH₄) ja dityppioksidikaasujen (N₂O) nettopäästöjen kehittyminen EU-alueella vuosina 2005–2050 suhteellisesti vuoden 2005 tasoon nähden EU:n referenssiskenaarion 2020 mukaan (Lähde: Euroopan komissio 2021).