

Regulation of the European Parliament and of the Council amending Regulation (EU) No 691/2011 as regards introducing new environmental economic accounts modules
(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 338(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national parliaments,

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) Decision No 2022/591 of the European Parliament and of the Council of 6 April 2022 laying down a General Union Environment Action Programme (*EAP*) to 2030¹ confirmed that ***monitoring, including*** sound information on the key trends, pressures and drivers for environmental change is essential for the development of effective policy, its implementation ***to reach the environmental objectives of the Union***, and the empowerment of citizens. Instruments should be developed with a view to enhancing ***general*** awareness of the **■** effects of ***socio-economic activities on the environment and the contribution of the environment to the economy and to wellbeing***. Environmental economic accounts ***are*** one such instruments.

¹ ***OJ L 114, 12.4.2022, p. 22.***

- (2) Article 10 of Regulation (EU) No 691/2011 of the European Parliament and of the Council² provides that the Commission is to report on the implementation of that Regulation to the European Parliament and the Council and, if appropriate, taking into account the findings of the pilot studies referred to in Article 4(2) of Regulation (EU) No 691/2011 to propose the introduction of new environmental economic accounts modules, such as environmentally related transfers (subsidies), forest accounts and ecosystem services accounts.
- (3) The new modules are to contribute directly to *the* Union's *environmental* policy priorities *as laid down in, inter alia, the 8th EAP*.
- (4) The United Nations Statistical Commission adopted the System of Environmental-Economic Accounting ('SEEA') central framework (*CF*) as an international statistical standard at its 43rd session in February 2012 and the SEEA Ecosystem Accounting (*SEEA EA*) chapters 1 to 7 (describing the accounting framework and the physical accounts) at its 52nd session in March 2021. The new modules set out by this Regulation are in line with the SEEA *CF and SEEA EA. Additionally, the SEEA has implemented the System of Environmental-Economic Accounts for Water (SEEA-Water), which supports the SEEA Central Framework*.
- (5) In order to carry out its tasks under the Treaties *and international law*, especially those related to the environment, sustainability and climate change, the Union should have relevant, comprehensive and reliable information. *Evidence-based decision-making* requires statistics that meet *high-quality* criteria, as set out in Regulation (EC) No 223/2009 of the European Parliament and of the Council¹⁴, in accordance with their objectives. *Furthermore it is necessary that Eurostat presents the data collected in a more accessible and user-friendly way, while actively promoting it.*³

² OJ L 192, 22.7.2011, p. 1.

³ *Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and repealing Regulation (EC, Euratom) No 1101/2008 of the European Parliament and of the Council on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, Council Regulation (EC) No 322/97 on Community Statistics, and Council Decision 89/382/EEC, Euratom establishing a Committee on the Statistical Programmes of the European Communities (OJ L 87, 31.3.2009, p. 164)*

- (6) In order to *achieve the objective of climate neutrality at the latest by 2050, it is essential to align all Union legislation and processes with the Union's long-term environmental and climate objectives as established under the European Green Deal, Regulation (EU) 2021/1119 (the 'European Climate Law'), in particular Article 6(4) thereof, and the Fit for 55 package. Several pieces of Union legislation already require close monitoring of trends, and thereby, of additional and more precise data. In this respect, it is key to get relevant and detailed data from Member States about their environment investments to make sure that the Union is on the right track to meet the European Green Deal objectives. For all those reasons, the system of European environmental economic accounts is to be developed into a comprehensive tool providing significant additional data for monitoring the implementation of Union environmental law and environmental policymaking.*
- (6a) *The General Union Environment Action Programme to 2030 calls for establishing a binding Union framework to monitor and report on Member States' progress towards phasing out fossil fuel subsidies, based on an agreed methodology, and without delay, setting a deadline for the phasing out of fossil fuel subsidies consistent with the ambition of limiting global warming to 1,5 °C, target of the Paris Agreement, at Union, national, regional and local level. In this respect, the Commission shall pay special attention to this topic in its program of feasibility studies and make an assessment on the quality of data available on energy subsidies, including fossil fuel subsidies and, if appropriate, submit a legislative proposal to the European Parliament and to the Council for introducing a new module.*
- (6b) *Water is a crucial resource so it is the need to assure a sustainable management of this resource and understand its relationship with economic activity. Therefore, the Commission should assess the quality of the data available on water in view to integrating a new module on water into the European environmental economic accounts, through a legislative proposal to the European Parliament and to the Council.*

- (6c) *Adaptation is a key component of the long-term global response to climate change. It is necessary to address the growing climate-related risks to health, including more frequent and intense heatwaves, wildfires and floods, food and water safety and security threats, and the emergence and spread of infectious diseases. The adverse effects of climate change can potentially exceed the adaptive capacities of Member States. Therefore, Member States and the Union should enhance their adaptive capacity, strengthen resilience and reduce vulnerability to climate change, as provided for in Article 7 of the Paris Agreement, as well as maximise the co-benefits with other policies and legislation. Article 5 of Regulation (EU) 2021/1119 requires that Member States adopt comprehensive national adaptation strategies and plans based on robust climate change and vulnerability analyses, progress assessments and indicators, while guided by the best available and most recent scientific evidence. As it is necessary to monitor progress towards climate adaptation, the Commission should assess the quality of the data available on climate adaptation and, based on the results obtained, may present a legislative proposal to the European Parliament and to the Council to integrate a new module on climate adaptation into the environmental economic accounts.*
- (6d) *Biodiversity loss is among the key vulnerabilities faced by economies, together with and amplified by climate change. Biodiversity is crucial for food security, human well-being and overall resilience of societies and economies. Member States and the Union should therefore enhance their response to the biodiversity crisis in line with their international commitments under the Kunming-Montreal Global Biodiversity Framework.*

- (6e) *Ecosystem accounts, as a means to present data on the extent and condition of ecosystem assets and the services they provide to society and the economy, aim to put a value to nature, allowing the costs to nature to be taken better into consideration. The aim of establishing monetary values should be to raise visibility on the cost of non-action and to support the Union to achieve its environmental objectives. The introduction of reporting requirements for monetary values of ecosystem services should be preceded by methodological, feasibility and pilot studies, in order to adequately prepare for the introduction of these requirements taking into consideration the relevant international standards. These studies should aim to investigate, inter alia, the monetary values to be reported; the relations between these values and the changes in the existing supply and use of ecosystem services; the potential policy uses of the results of the different estimation methods; under which conditions the estimates are fit for aggregation with one another and with other national accounting aggregates; and the most suitable format of the tables for reporting. In order to deliver its intended effects fully, the Commission shall carry out an assessment of methodological possibilities and the feasibility of the monetary measurement of Ecosystem services, taking into consideration the international standard SEEA EA. Based on its results, the Commission may submit a legislative proposal amending this Regulation in order to include the monetary ecosystem accounts.*
- (7) The conclusions of the Economic and Financial Affairs Council on European statistics held on 6 November 2020 encourage the European statistical system to respond to the emerging information demands set out by the European Green Deal, including those related to the review and enlargement of the programme of European environmental economic accounts.
- (8) In 2019, the European Court of Auditors published a special report No 2019/16 entitled “European Environmental Economic Accounts: usefulness for policymakers can be improved”.⁴ That report points to a need for more complete data on forests and ecosystems and for full implementation of forest accounts.

⁴ <https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=51214>

- (8a) *The Commission (Eurostat) and the National Statistical authorities tasked to produce environmental economic accounts should strive to continuously extend the coverage and improve the quality of statistical data that supports monitoring and evaluating the Union's progress in implementing legislative acts adopted under the framework of the Fit for 55 package and following the European Green Deal, the European Climate Law, the Resilience and Recovery Facility and other relevant legislation as well as in complying with EU international commitments, while taking into consideration United Nations and other international statistical standards.*
- (8b) *Since 2011 the European environmental economic accounts have delivered high quality data and statistics to support evidence-based policy making in the areas of the European Green Deal and other Union policies. It is of key importance to publish and present this data and statistics in an understandable and accessible way for all users. The Commission (Eurostat) should develop and maintain a statistical data portal summarising the key indicators from environmental economic accounts, in a user-friendly way. Access to this data portal should be public and free of charge. The statistical data portal should aim at improving dissemination and communication of European environmental economic accounts and not interfere with established governance mechanisms to report and monitor progress towards objective and targets of specific Union initiatives, such as e.g. the 8th Environmental Action Programme.*
- (9) **█** In order to ensure flexibility and to reduce the administrative burden on respondents, National Statistical Institutes and other national authorities, Member States should be allowed to use *other relevant sources, methods and* innovative approaches *such as, for example, earth observation (Copernicus services)*. Member States should inform the Commission and provide details as regards the quality of those approaches **█** .

- (9a) *Member States should be able to receive financial support for the modernisation, and the improvement of the quality and timeliness of environmental statistics and the implementation of methodological, feasibility and pilot studies from the Single Market Programme as established by Regulation (EU) 2021/690 of the European Parliament and of the Council⁵. In the context of subsequent multiannual financial frameworks, financial support should be provided in accordance with the rules of the applicable European statistical programme referred to in Regulation (EC) 223/2009.*
- (10) As the Union currently consists of 27 Member States, it is appropriate to refer to ‘EU-27’.
- (11) The list of possible future European environmental economic accounts listed in Article 10 of Regulation (EU) No 691/2011 needs to be updated to align them to the current policy priorities of the Union.
- (12) The European System of Accounts 1995 (ESA95) was replaced by the European System of Accounts 2010 (‘ESA 2010’) set up by Regulation (EU) No 549/2013 of the European Parliament and of the Council⁶.
- (13) ‘ESA 2010’ contains the reference framework of common standards, definitions, classifications and accounting rules for drawing up the accounts of the Member States for the statistical requirements of the Union.
- (13a) *The Commission, in close cooperation with the Member States, should publish a methodological handbook, which contains supplementary guidance concerning the compilation of the environmental economic accounts set up in the different modules covered by this Regulation. The handbook should include guidelines for the calculation of the forest account characteristics, such as the Net annual increment of timber from the live tree stock or the calculation of the Ecosystems provisioning services, such as the contribution to the global climate regulation from the reduction of greenhouse gases concentrations. The methodological manual should be published once this Regulation enters into force.*

⁵ OJ L 153, 3.5.2021, p. 1.

⁶ OJ L 174, 26.6.2013, p. 1–727

- (14) *Climate change mitigation, including related investments, is indispensable to achieve the objective of EU climate neutrality at the latest by 2050. The Commission (Eurostat) should start regularly providing data and statistics compiled from the relevant data available from the environmental economic account modules and, if appropriate, from other data sources. These data should provide breakdowns by Member States and cover all sectors of the economy relevant for climate change mitigation. The power to update the list of characteristics and the reporting tables of Annex V of this regulation is delegated to the Commission. Therefore, the Commission should adopt a delegated act following the Article 290 of the Treaty on the Functioning of the European Union, while ensuring that this act will not impose significant additional burden on the Member States and on the respondent units.*
- (15) Since the objectives of this Regulation, namely the introduction of new environmental *economic* accounts modules into the current legal framework for European statistics on EEEA, cannot be sufficiently achieved by the Member States but can rather, by reason of consistency and comparability, be better achieved at Union level, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on the European Union. In accordance with the principle of proportionality as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives.

- (15a) In order to take account of environmental, economic and technical developments where necessary, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission to supplement this Regulation by providing methodological guidance, and to amend the Annexes I to IX of this Regulation as regards the information referred to in paragraph 2, points (c), (d) and (e) of Article 3. Likewise, the Commission should be delegated the power to amend section 3 of Annex V to include characteristics regarding other investments on climate change mitigation. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement on Better Law-Making of 13 April 2016^[1]. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.*
- (15b) Implementing powers should likewise be conferred on the Commission to adopt implementing acts granting, within a specified time period, derogations to Member States in so far as the national statistical systems require major adaptations. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers.⁷*

- (16) The European Statistical System Committee has been consulted,

^[1] OJ L 123, 12.5.2016, p. 1.

⁷ Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

HAVE ADOPTED THIS REGULATION:

Article 1

Regulation (EU) No 691/2011 is amended as follows:

- (1) *In Article 1, paragraph 1, the following subparagraph is added: "In this respect, this Regulation contributes to provide sound information on key trends, pressures and drivers for environmental change and thereby supports monitoring and evaluation of the Union's progress in meeting its environmental objectives laid down in Union law as well as its international commitments in this area."*
- (1a) in Article 2, the following points are added:
- '(7) 'forest accounts' means assets accounts for forest resources, comprising wooded land and timber on wooded land, and economic activity accounts for forestry and logging;
 - (8) 'environmental subsidies and similar transfers' means current and capital transfers, as defined in ESA 2010, intended to support activities protecting the environment and safeguarding *natural* resources and related products;
 - (9) 'ecosystem accounts' means a set of accounts designed to provide consistent information on extent and condition of ecosystems and on the flows of services from these ecosystems to *the socio-economic system.*';
- (2) Article 3 is amended as follows:
- (a) in paragraph 1, the following points are added:
 - '(g) a module for forest accounts, as set out in Annex VII;
 - (h) a module for environmental subsidies and similar transfers accounts, as set out in Annex VIII;

- (i) a module for ecosystem accounts, as set out in Annex IX.'
- (b) *deleted*
 - '4a. ■
- (bc) *(b) paragraph 3 is replaced by the following:*
- (bd) *'3. The Commission shall be empowered to adopt delegated acts, where necessary to take account of environmental, economic and technical developments, in accordance with Article 9:*
- (be) *(a) to supplement this Regulation by providing methodological guidance;*
- (bf) *(b) to amend Annexes I to VI as regards the information referred to in paragraph 2, points (c), (d) and (e);*
- (bg) *(c) to amend Annexes VII, VIII and IX as regards the information referred to in paragraph 2, points (c), (d) and (e), provided that:*
- (bh) *- the list of characteristics referred to in paragraph 2, point (c), is only amended by up to four characteristics for each Annex every three years; and*
- (bi) *- the information referred to in paragraph 2, point (d), is amended only in order to set out the first reference year, frequency and transmission deadlines of any added characteristics.*
- (bj) *In exercising its power pursuant to this paragraph, the Commission shall ensure that its delegated acts do not impose a significant additional burden on the Member States or on the respondents. The Commission shall duly justify the actions.'*

(2a) *Article 4 is amended as follows:*

(a) *the title is replaced by the following: 'Pilot and feasibility studies';*

(b) *paragraph 1 is replaced by the following:*

‘ *1. The Commission shall draw up a programme for pilot studies to be carried out by Member States on a voluntary basis in order to develop reporting and improve data quality, establish long time series and develop methodology. The programme shall include pilot studies to test the new environmental economic account modules. In drawing up the programme, the Commission shall give particular attention to modules producing data on energy subsidies, including fossil fuel subsidies, and ensure that no additional administrative or financial burdens are placed on the Member States and on the respondent units.* ’

(c) *the following paragraph is added:*

‘ *3. In addition to the programme of pilot studies, the Commission (Eurostat) shall by [18 months from the date of entry into force of this Regulation at the latest], in cooperation with the Member States carry out an assessment of methodological possibilities and the feasibility of monetary valuation, possible reporting values where those values are missing and possible alternative ways of measuring for Ecosystem services Accounts taking into account international standards of SEEA EA. Based on the results of these studies, the Commission may submit to the European Parliament and to the Council a new proposal amending this Regulation in order to include monetary ecosystem accounts.* ’

(3) in Article 5, paragraph 2, the following *point* is added:

‘(d) any other relevant sources, methods or innovative approaches insofar as they allow for the production of *environmental economic accounts* that are comparable and compliant with the applicable specific quality requirements. Member States which decide to use the sources, methods or innovative approaches referred to in point (d) shall inform the Commission (Eurostat) *as soon as possible and before the end of the year preceding the implementation of the method* and shall provide details concerning the quality of the data obtained.

(4) ■ Article 8 ■ is replaced by the following:

‘1. ‘Article 8 Derogations

1. *The Commission may adopt implementing acts granting derogations to Member States in so far as the national statistical systems require major adaptations. Derogations may be granted from the Annexes during the transitional period referred to therein or from the implementing measures and delegated acts adopted pursuant to this Regulation for a maximum duration of two years. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 11(2).’ This paragraph shall not apply to changes resulting from modifications in classifications and nomenclatures or changes to accounting frameworks of national and regional accounts in accordance with Regulation (EU) No 549/2013.*

2. **█** For the purposes of obtaining a derogation under paragraph 1 for Annexes VII, VIII and IX, the Member State concerned shall present a duly justified request to the Commission no later than [OPOCE, please insert exact date which is 24 months after the entry into force of this Regulation]. *For the purposes of obtaining a derogation under paragraph 1 from implementing measures or delegated acts adopted pursuant to the Regulation and which enter into force after [OPOCE, please insert the date of entry into force of this Regulation], the Member State concerned shall present a duly justified request to the Commission within three months of the date of entry into force of the act concerned.*’;

4a. *the following Article is inserted:*

‘Article 8a Financing

1. *For the implementation of this Regulation, the Union shall] provide from the Single Market Programme established by Regulation (EU) 2021/690 financial support to the national statistical institutes and other national authorities referred to in Article 5(2) of Regulation (EC) No 223/2009, for:*

(a) the development of methodologies for statistics under this Regulation, including the participation of the Member States in representative methodology, feasibility and pilot studies referred to in Article 4;

(b) to improve statistical quality of accounts, in particular for the development or enhancement of processes, including digitally based solutions that aim to produce statistics of a higher quality;

(c) to improve timeliness of accounts and to reduce the administrative and reporting burden.

2. *The amount of Union financial contribution under this Article shall be established in accordance with the rules of the Single Market Programme as part of the annual budgetary procedure, subject to the availability of funding. The budgetary authority shall determine the appropriation available each year. ’*
 3. *For the implementation of this Regulation, a financial contribution may also be made available to the national statistical institutes and other national authorities referred to in the list established pursuant to Article 5(2) of Regulation (EC) No 223/2009 from other applicable financial programmes of the European Union in accordance with the rules of such programmes.’*
- (5) Article 9 is amended as follows:
- (a) paragraphs 2 and 3 are replaced by the following:
 - ‘2. The power to adopt delegated acts referred to in Article 3(3) **and** (4) and **Article 10** shall be conferred on the Commission for a period of five years from 11 August 2011. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the 5-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.
 3. The delegation of power referred to in Article 3(3) **and** (4) and **Article 10** may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.’

(b) paragraph 5 is replaced by the following:

‘5. A delegated act adopted pursuant to Article 3(3) **and** (4) and **Article 10** shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of two months of notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or the Council.’

(5a) *.The following Article 9a is inserted:*

"Article 9a Environmental Economic Account Dashboard

1. The Commission (Eurostat) shall establish an Environmental Economic Account Statistical Data Portal ('Dashboard'), which shall summarise the key indicators from environmental economic accounts in a user-friendly and interactive way.

The Data portal shall display the data provided by Member States in each of the modules covered in this Regulation and on climate change mitigation investment referred to in [Article 10 new paragraph].

2. The Data portal shall be operational by December 2024 and shall be updated by the Commission (Eurostat) once a year. The data portal shall be made publicly available on the Eurostat website ."

(6) **Article 10 is modified as follows:**

a) the first hyphen point is replaced by the following: "- for introducing new environmental economic account modules, such as Water Accounts (quantitative and qualitative), Resource Management Expenditure Accounts, Subsidies or support measures potentially harmful for the environment and Waste Accounts;"

b) the following paragraphs are added:

"By 31 December 2024 [to start] and at least every two years thereafter, the Commission (Eurostat) shall issue a digital publication that contains data and statistics on climate-change mitigation including investments, compiled from the relevant data available from the environmental economic account modules and, if appropriate, from other data sources. As appropriate, the Commission (Eurostat) shall adopt a delegated act in accordance with Article 9 in order to amend section 3 of Annex V to include characteristics regarding other investments on climate change mitigation. The data included in the digital publication shall provide a breakdown of information per Member States, including on investments, and shall cover all sectors from the economy and activities "

"By ... [2 years from the date of entry into force of this Regulation] the Commission shall assess the quality of data available on energy subsidies, including fossil fuel subsidies, on climate change adaptation and on water, and, if appropriate, submit a legislative proposal introducing the following new modules: - Energy subsidies including fossil fuel subsidies - Climate change adaptation including expenditure on it - Water accounts" '

(7) in Annex IV, section 3, the words 'environmental protection transfers (received/paid)' shall be deleted;

(8) all references to 'EU-28' and the term 'ESA 95' shall be replaced by EU-27 and by 'ESA 2010' respectively throughout the text and the Annexes.

- (9) Annexes VII, VIII and IX, as set out in the Annex to this Regulation, are added to Regulation (EU) No 691/2011.

Article 2

The data on environmental protection transfers (received/paid) formerly submitted pursuant to Annex IV shall be submitted under Annex VIII. Member States shall no longer provide data on environmental protection transfers (received/paid) pursuant to Annex IV.

Article 3

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

Point (7) of Article 1 shall apply from 1 January 2025.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the European Parliament

The President

For the Council

The President

Annex

‘ANNEX VII

MODULE FOR FOREST ACCOUNTS

Section 1

OBJECTIVES

Forest accounts record and present data on forest resources and economic activity in the forestry and logging industry in a way that is fully compatible with the data reported under the European System of Accounts (ESA). Forest accounts provide complementary information and use concepts adapted to the particular nature of forests and of the forestry and logging industry.

This Annex defines the data to be collected, compiled, transmitted and evaluated for forest accounts by Member States.

Section 2

COVERAGE

Forest accounts record the stocks and flows of forest resources (wooded land and timber) and economic activity in the forestry and logging industry, including production of roundwood and the extraction and gathering of wild growing non-wood forest products.

Section 3

LIST OF CHARACTERISTICS

Member States shall produce forest accounts according to the characteristics described in this Section.

- (1) Asset accounts of wooded land and timber. Wooded land is defined as the sum of the three points below.

- (a) Forest available for wood supply: Forests where any environmental, social or economic restrictions do not have a significant impact on the current or potential supply of wood. These restrictions can be established by legal rules, managerial/owner's decisions or because of other reasons.
- (b) Forest not available for wood supply is all forests that are not considered available for wood supply according to point a). These are forests where environmental, social, economic or legal restrictions prevent any significant wood supply. It includes (a) forests with legal restrictions or restrictions resulting from other political decisions that totally exclude or severely limit wood supply for reasons such as environmental or biodiversity conservation (protection forest, national parks, nature reserves and other protected areas such as those of special environmental, scientific, historical, cultural or spiritual interest); (b) forests where physical productivity or wood quality is too low or harvesting and transport costs are too high to justify wood harvesting, apart from occasional cuttings for auto-consumption.
- (c) Other wooded land.

'Forest' is defined as land spanning more than 0.5 hectares with trees higher than five metres and a canopy cover of more than 10% or trees able to reach these thresholds in situ. It does not include land that is predominantly under agricultural land use or trees in urban settings, such as city parks, alleys and gardens.

'Other wooded land' is defined as land not classified as forest, spanning more than 0.5 hectares; with trees higher than five metres and a canopy cover of 5-10% or trees able to reach these thresholds in situ; or with a combined cover of shrubs, bushes and trees greater than 10%. It does not include land that is predominantly under agricultural land use or trees in urban settings, such as city parks, alleys and gardens.

'Net annual increment of timber' is defined as the average annual volume growth of live trees less the average annual mortality.

‘Removals’ are defined as the volume of all trees, living or dead, that are felled and removed from the forest, other wooded land or other felling sites. It includes unsold roundwood stored at the forest roadside. It also includes natural losses that are recovered, removals during the year of wood felled in an earlier period, removals of non-stem wood (such as stumps and branches), and removal of trees killed or damaged by natural causes (known as natural losses), e.g. fire, wind, insects and diseases. It does not include non-woody biomass or any wood that is left in the forest and not removed during the year, e.g. stumps, branches, tree tops and felling residues (harvesting waste).

‘Irretrievable losses’ are defined as felling residues and all fellings from windthrow that cannot be removed from the forest, and timber lost through forest fires.

- (2) Economic accounts reporting economic activity in the forestry and logging industry. The forest and logging industry is defined as all local kind-of-activity units (local KAU) which perform activities classified under NACE Rev. 2 division A02.

The following characteristics, using the ESA definitions, shall be reported:

- output;
- of which: output for own final use
- intermediate consumption;
- gross value added;
- consumption of fixed capital;
- Other taxes on production;
- Other subsidies on production;
- compensation of employees;
- gross fixed capital formation and acquisitions less disposals of non-financial non-produced assets;

- changes in inventories;
- capital transfer.

Member States shall report employment in the forestry and logging industry in thousand annual work units (AWUs) as defined under Regulation (EC) No 138/2004 of the European Parliament and of the Council¹.

Section 4

FIRST REFERENCE YEAR, FREQUENCY AND TRANSMISSION DEADLINES

- (1) Statistics shall be compiled and transmitted on a yearly basis.
- (2) Statistics shall be transmitted within 21 months of the end of the reference year.
- (3) In order to meet user needs for complete and timely datasets, the Commission (Eurostat) shall produce, as soon as sufficient country data becomes available, estimates for the EU totals for the main aggregates of this module. The Commission (Eurostat) shall, wherever possible, produce and publish estimates for data that have not been transmitted by Member States within the deadline specified in point 2.
- (4) The first reference year is 2023.
- (5) In the first data transmission, Member States shall include annual data from 2022 to the first reference year.
- (6) In each subsequent data transmission to the Commission, Member States shall provide annual data for the years $n-2$, $n-1$ and n , where n is the reference year. Member States shall resubmit data for years from 2022 onwards whenever the data are revised. Member States may provide any available data for the years preceding 2022.

Section 5

REPORTING TABLES

For the characteristics laid down in Section 3, the following information shall be reported:

- (1) Area of wooded land, broken down by:
 - forest available for wood supply;
 - forest not available for wood supply;
 - other wooded land.

Each of those categories shall be further broken down by:

- opening area at the beginning of the reference year;
- afforestation and other increases;
- deforestation and other decreases;
- statistical reclassification;
- closing area at the end of the reference year.

Data shall be reported in thousand hectares.

- (2) Volume of timber, broken down by:
 - forest available for wood supply;
 - forest not available for wood supply;
 - other wooded land.

Forest available for wood supply shall be further broken down by:

- opening stock at the beginning of the reference year;
- net increment;
- removals;
- irretrievable losses;
- statistical reclassification;
- balancing item;
- closing stock at the end of the reference year.

Forest not available for wood supply and other wooded land shall be further broken down by:

- opening stock at the beginning of the reference year;
- removals;
- other changes (between opening and closing stocks);
- closing stock at the end of the reference year.

Data shall be reported in over-bark, in thousand m³.

(3) Value of timber, broken down by:

- forest available for wood supply;
- forest not available for wood supply;
- other wooded land.

Forest available for wood supply shall be further broken down by:

- opening stock at the beginning of the reference year;
- net increment;
- removals;
- irretrievable losses;
- revaluation;
- statistical reclassification;
- balancing item;
- closing stock at the end of the reference year.

Forest not available for wood supply and other wooded land shall be further broken down by:

- opening stock at the beginning of the reference year;
- removals;
- other changes (between opening and closing stocks);
- closing stock at the end of the reference year.

Data shall be reported in million national currency.

- (4) For economic accounts, output referred to in Section 3 shall be reported according to the following breakdown, with products defined in terms of the classification of products by activity version 2.1:
- live forest tree plants (product 02.10.11) and tree seeds (product 02.10.12);
 - forest trees, defined as the net increment of timber in cultivated forests (product 02.10.30) ;
 - wood in the rough (product 02.20.1), ***including sales of timber from uncultivated forests***, comprising the following items to be reported in two separate rows:
 - (a) fuel wood (products 02.20.14 and 02.20.15);
 - (b) logs, i.e. the sum of logs of coniferous wood (product 02.20.11), logs of non-coniferous wood except tropical wood (product 02.20.12), and logs of tropical wood (product 02.20.13).
 - wild growing non-wood products (product 02.30);
 - Services characteristic of the forestry and logging activity defined as forest tree nursery services (product 02.10.2), support services to forestry (product 02.4), and any other services provided by a local kind-of-activity unit (KAU) of the forestry industry;

- other products from related secondary activities in the local KAU, such as mushrooms and truffles (01.13.8), other berries, fruit of genus vaccinium n.e.c. (01.25.19), natural rubber (01.29.10), other wood in rough including split poles and pickets (16.10.39), wood charcoal (20.14.72), nature reserve services including wildlife preservation services (91.04.12), and any other product produced by a local KAU.

Intermediate consumption of forestry and logging industry referred to in Section 3 shall be reported according to the following breakdown, with products defined in terms of the classification of products by activity version 2.1:

- (a) the sum of live forest tree plants (product 02.10.11), forest tree seeds (product 02.10.12), and forest trees (product 02.10.3) used to produce timber;
- (b) the sum of energy and lubricants, including electricity (product 35.11.10), motor spirit (gasoline) (product 19.20.21), natural gas – liquefied or in a gaseous state (product 06.20.10), lubricating petroleum oils and heavy preparations n.e.c. (product 19.20.29), and other similar products;
- (c) the sum of services characteristic of forestry and logging, including forest tree nursery services (product 02.10.2), support services to forestry (product 02.4), and any other services provided by a local KAU of the forestry and logging industry;
- (d) other goods and services not accounted for in any of the variables of intermediate consumption above.

Changes in inventories of the forestry and logging industry referred to in Section 3 shall be reported according to the following breakdown:

- changes in work-in-progress on cultivated biological assets;
- other changes in inventories.

All characteristics shall be reported in million national currency.

(5) *Data on other wooded land shall be reported on a voluntary basis.*

Section 6

MAXIMUM DURATION OF THE TRANSITIONAL PERIODS

For implementation of the provisions of this Annex, the maximum duration of the transitional period is 2 years from the first transmission deadline.

ANNEX VIII

MODULE FOR ENVIRONMENTAL SUBSIDIES AND SIMILAR TRANSFERS ACCOUNTS

Section 1

OBJECTIVES

Environmental subsidies and similar transfers accounts collect and present data on current and capital transfers intended to support activities that protect the environment and natural resources, including the production and use of environmental products, in a way that is compatible with the concepts and definitions of the European System of Accounts (ESA 2010).

This Annex defines the data to be collected, compiled, transmitted and evaluated for environmental subsidies and similar transfers accounts by the Member States. These data are also used for compiling national environmental protection expenditure as set out in Annex IV.

Section 2

COVERAGE

The environmental subsidies and similar transfers accounts record unrequited payments from general government to institutional sectors (within the domestic economy and to the rest of the world) and from non-residents (rest of the world), for the purpose of protecting the environment or reducing the use and extraction of natural resources.

Section 3

LIST OF CHARACTERISTICS

Member States shall produce environmental subsidies and similar transfers accounts according to the following characteristics:

- subsidies (ESA code D.3);
- other current transfers (ESA codes D.6 and D.7);
- capital transfers (ESA code D.9).

All data shall be reported in million national currency.

Section 4

FIRST REFERENCE YEAR, FREQUENCY AND TRANSMISSION DEADLINES

- (1) Statistics shall be compiled and transmitted on a yearly basis.
- (2) Statistics shall be transmitted within 24 months of the end of the reference year.
- (3) In order to meet user needs for complete and timely datasets, the Commission (Eurostat) shall produce, as soon as sufficient country data becomes available, estimates for the EU totals for the main aggregates of this module. The Commission (Eurostat) shall, wherever possible, produce and publish estimates for data that have not been transmitted by Member States within the deadline specified in point 2.
- (4) The first reference year is 2023.
- (5) In the first data transmission, Member States shall include annual data from 2022 to the first reference year.

- (6) In each *subsequent* data transmission to the Commission, Member States shall provide annual data for the years n-2, n-1 and n, where n is the reference year. Member States shall resubmit data for years from 2022 onwards whenever the data are revised. Member States may provide any available data for the years preceding 2022.

Section 5

REPORTING TABLES

- (1) For the characteristics referred to in Section 3, data shall be reported by:
- paying institutional sector, as follows:
 - general government;
 - rest of the world.
 - receiving institutional sector, as follows:
 - general government;
 - corporations;
 - households;
 - non-profit institutions serving households;
 - rest of the world.
- (2) For each of the above reporting categories, data shall be reported by classes of the classification of environmental protection activities (CEPA) and the classification of resource management activities (CReMA), grouped as follows:
- CEPA 1;

- CEPA 2;
- CEPA 3;
- CEPA 4;
- CEPA 5;
- CEPA 6 (*including former CReMA 12*);
- sum of CEPA 7, CEPA 8 and CEPA 9;
- CReMA 10;
- CReMA 11;
- CReMA 13;
- CReMA 13A;
- CReMA 13B;
- CReMA 13C;
- CReMA 14;
- sum of CReMA 15 and CReMA 16.

(3) Transfers receivable by corporations from general government grouped by the sum of all CEPA classes (CEPA 1-9) and all CReMA classes (CReMA 10-16) should be further grouped according to the classification of economic activities NACE Rev. 2 as follows:

- NACE A – agriculture, forestry and fishing;
- NACE B – mining and quarrying;

- NACE C – manufacturing;
 - NACE D – electricity, gas, steam and air-conditioning supply;
 - NACE E – water supply, sewerage, waste management and remediation;
 - NACE F – construction;
 - NACE G – wholesale and retail trade, repair of motor vehicles and motorcycles;
 - NACE H – transportation and storage;
 - NACE I-U – other NACE sections.
- (4) The CEPA classes referred to in points 2 and 3 are as set out in Annex IV; the CReMA classes are as set out in Annex V.

Section 6

MAXIMUM DURATION OF THE TRANSITIONAL PERIODS

For implementation of the provisions of this Annex, the maximum duration of the transitional period is 2 years from the first transmission deadline.

ANNEX IX

MODULE FOR ECOSYSTEM ACCOUNTS

Section 1

OBJECTIVES

Ecosystem accounts present data on the extent and condition of ecosystem assets and the services they provide to society and the economy. The data are in line with the SEEA Ecosystem Accounting and compatible with the data reported under the European System of Accounts.

Ecosystem accounts use existing information where possible, including from earth observation, environmental reporting and other data sources.

Section 2

COVERAGE

Ecosystem accounts record the extent of ecosystems, the condition of ecosystems, and the flows of ecosystem services.

Ecosystem extent is the size of ecosystems in area. Ecosystem extent accounts cover terrestrial (including freshwater) and marine ecosystems in the national territory.

Ecosystem condition is the quality of an ecosystem measured in terms of its abiotic, biotic and landscape characteristics, by ecosystem types.

Ecosystem services are the benefits ecosystems provides to economic and other human activities. They include (i) provisioning, (ii) regulating and maintenance, and (iii) cultural services. Ecosystem services accounts record the actual supply and use of ecosystem services provided by the ecosystems in the national territory.

Thematic accounts are accounts that organise data according to specific policy themes such as biodiversity, climate change, oceans and urban areas.

Section 3

LIST OF CHARACTERISTICS

Member States shall produce ecosystem accounts according to the following characteristics.

- (1) Ecosystem extent accounts recording the area and change in area for each ecosystem type within the national territory. Member States shall report ecosystem extent accounts in thousand hectares.
- (2) As a component of the ecosystem extent accounts, a conversion matrix recording conversions between ecosystem types between two points in time, in hectares.
- (3) Ecosystem condition accounts recording ecosystem characteristics as follows:
 - (a) for settlements and other artificial areas:
 - green areas in cities and adjacent towns and suburbs shall be reported in % of total area, calculated for the entire area of the cities and adjacent towns and suburbs, including all ecosystem types in that area;
 - concentration of particulate matter, with a diameter up to 2.5 μm in cities, shall be reported in $\mu\text{g}/\text{m}^3$ as a national average for the reporting period.
 - (b) for cropland:
 - soil organic carbon stock in topsoil shall be reported in tonne/ha, as a national average for the reporting period.

- (c) for grassland:
 - soil organic carbon stock in topsoil shall be reported in tonne/ha, as a national average for the reporting period.
- (d) for cropland and grassland together:
 - common farmland bird index shall be reported as a national aggregate index for the reporting period.
- (e) for forest and woodland:
 - dead wood shall be reported in m³/ha, as a national average for the reporting period;
 - tree cover density shall be reported in %, as a national average for the reporting period.
 - ***common forest bird index; the forest bird indicator describes trends in the abundance of common forest birds across their European ranges over time; it is a composite index created from observational data of bird species characteristic for forest habitats in Europe; the index is based on a specific list of species in each Member State.***
- (f) for coastal beaches, dunes and wetlands:
 - the share of artificial impervious area cover, present in coastal area that includes ecosystem type coastal beaches, dunes and wetlands shall be reported in % as a national average for the reporting period.

Cities, towns and suburbs are local administrative units, categorised according to the degree of urbanisation typology set out under Regulation (EU) 2017/2391.

- (4) Ecosystem services accounts recording the supply and use of ecosystem services in supply and use tables. The supply table shall record the supply of ecosystem services from ecosystems to *socio-economic systems*. The use table shall record the use of ecosystem services by the type of use as defined in Section 5.

The supply and use tables shall be reported in the following physical units.

(a) Provisioning services

- Crop provision, defined as the ecosystem contribution to plant growth as approximated by the amount of harvested crops for different uses. This includes food and fibre production, fodder and energy, and grazed biomass, as set out under Annex III, Table A, Section 1.1 and Section 1.2.
- Pollination, defined as the ecosystem contribution by wild pollinators to the production of the crops above. The contributions shall be reported in tonnes of pollinator-dependent crops that can be attributed to wild pollinators, by type of crop for the main types of pollinator-dependent crops comprising fruit trees, berries, tomatoes, oilseeds and ‘other’.
- Wood provision, defined as the ecosystem contribution to the growth of trees and other woody biomass, shall be reported as net increment as defined in Annex VII in over-bark, in thousand m³.

(b) Regulating and maintenance services

- Air filtration is defined as the ecosystem contribution to filtering air-borne pollutants through the deposition, uptake, fixing and storage of pollutants by ecosystem components (particularly trees). This mitigates the harmful effects of the pollutants. The contributions shall be reported in tonnes of particulate matter adsorbed.

- Global climate regulation is defined as the ecosystem contribution to reducing concentrations of greenhouse gases in the atmosphere through the removal (net sequestration) of carbon from the atmosphere and the retention (storage) of carbon in ecosystems. The contributions shall be reported in terms of tonnes of net sequestration of carbon and tonnes of organic carbon stored in terrestrial ecosystems, including above ground and below ground *stock* .
- Local climate regulation is defined as the ecosystem contribution to regulating ambient atmospheric conditions in urban areas through vegetation that improves the living conditions of people and supports economic production. It shall be expressed and reported as the reduction of temperature in cities, due to the effect of urban vegetation, in degrees Celsius on days exceeding 25 degrees Celsius.

(c) Cultural services

- Nature-based tourism-related services are defined as the ecosystem contribution, in particular through the biophysical characteristics and qualities of ecosystems, that enable people to use and enjoy the environment through direct, in-situ, physical and experiential interactions with the environment. These contributions shall be reported in number of overnight stays in hotels, hostels, camping grounds, etc. that can be attributed to visits to ecosystems.

(5) Ecosystem accounts shall use the following table of ecosystem types:

Category	Ecosystem type
1	Settlements and other artificial areas
2	Cropland
3	Grassland (pastures, semi-natural and natural grassland)
4	Forest and woodland
5	Heathland and shrub
6	Sparsely vegetated ecosystems
7	Inland wetlands
8	Rivers and canals
9	Lakes and reservoirs
10	Marine inlets and transitional waters
11	Coastal beaches, dunes and wetlands
12	Marine ecosystems (coastal waters, shelf and open ocean)

Section 4

FIRST REFERENCE YEAR, FREQUENCY AND TRANSMISSION DEADLINES

- (1) Statistics shall be compiled and transmitted:
 - every 3 years for ecosystem extent and ecosystem condition accounts. The data shall refer to a representative average for the reference year, and to the conversion matrix to the change in the 3 years between 2 reference years;
 - on a yearly basis, ***provided that modelling tools are made available by Eurostat for calculating ecosystem services*** for ecosystem services accounts. ***In the absence of such tools, every three years for ecosystem services accounts applies.***
- (2) Statistics shall be transmitted within 24 months of the end of the reference year.
- (3) In order to meet user needs for complete and timely datasets, the Commission (Eurostat) shall produce, as soon as sufficient country data become available, estimates for the EU totals. The Commission (Eurostat) shall, wherever possible, produce and publish estimates for data that have not been transmitted by Member States within the deadline specified in point 2.
- (4) The first reference year is 2024. For the conversion matrix, the first reference year is 2027.
- (5) In the first data transmission, Member States shall include data from 2024 for extent and condition accounts and for ecosystem services supply and use tables in physical units. For the conversion matrix, the data shall show the changes between 2024 and 2027.
- (6) In each subsequent data transmission to the Commission, Member States shall provide ecosystem services extent and condition accounts data for years n-3 and n, where n is the reference year. Member States shall resubmit data from 2024 onwards whenever the data are revised. Member States may provide any available data for the years preceding 2024.

Section 5

REPORTING TABLES

- (1) Ecosystem extent accounts: For all ecosystem types referred to in Section 3, data in the first transmission shall be reported for the first reference year. For all subsequent data transmissions, data shall be reported as follows:

- extent in the previous reference year;
- additions;
- reductions;
- extent in the current reference year.

The conversion matrix shall report conversions between all ecosystem types referred to in Section 3 between the previous and current reference year.

- (2) Ecosystem services accounts: For ecosystem services referred to in Section 3, data shall be reported in supply and use tables as follows:

Supply table recording the annual supply of the services as referred to in Section 3 by all ecosystem types as referred to in Section 3, except categories 10 and 12;

Use table recording the use of ecosystem services according to the following breakdown:

- intermediate consumption *of* industries ■
- government final consumption;
- households final consumption;
- gross capital formation;
- exports.

- (3) A Member State is not obliged to report data if its total land area does not exceed **0.3%** of the EU's total land area.

Section 6

MAXIMUM DURATION OF THE TRANSITIONAL PERIODS

For implementation of the provisions of this Annex, the maximum duration of the transitional period is 2 years from the first transmission deadline.

-
- 1 Regulation (EC) No 138/2004 of the European Parliament and of the Council of 5 December 2003 on the economic accounts for agriculture in the Community (OJ L 33, 5.2.2004, p. 1).'
-