



 COMPARATIVE TABLE OF TEXTS

ESRS E4

BIODIVERSITY AND
ECOSYSTEMS

 DECEMBER 2025

 EFRAG

Comparative Table: ESRS as enacted in 2023, Exposure Draft ESRS, and Draft Amended ESRS – ESRS E4 *Biodiversity and Ecosystems*

Disclaimer: The ‘Comparative Table: ESRS as enacted in 2023, Exposure Draft ESRS, and Draft Amended ESRS’ accompanies but is not part of the draft amended ESRS issued by EFRAG on 3 December 2025. It is a non-binding document which complements and should be read in conjunction with the Basis for Conclusions and Log of Amendments, where descriptions and illustrations of the main changes to the Standards can be found. This document does not reflect the position of the European Union or the European Commission DG Financial Stability, Financial Services and Capital Markets Union (DG FISMA).

Introduction

1. This document illustrates the text of each of the following three versions of ESRS E4: ESRS E4 as enacted in 2023 (Column 1), Exposure Draft ESRS E4 (Column 2) and Draft Amended ESRS E4 (Column 3).
2. This document is purely illustrative and does not offer explanations for changes to ESRS E4. The Basis for Conclusions and the relevant Log of Amendments should be consulted for an explanation of draft amended ESRS E4.
3. By reading each row, the reader can understand how each paragraph of ESRS E4 has changed across the three versions of ESRS listed above. The starting point is Column 1, the text of the ESRS E4 as enacted in 2023.

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
Objective 1. The objective of this Standard is to specify Disclosure Requirements which will enable users of the sustainability statement to understand:	Objective 1. When reporting in accordance with the ESRS, the sustainability statement shall cover information in relation to E4 ' <i>Biodiversity and Ecosystems</i> ', when this topic relates to material impacts, risks and opportunities . The DR on the material impacts, risks and opportunities is expected to cover policies, actions and targets (if in place), dependencies when relevant, metrics and the related financial effects .	Objective 1.The sustainability statement shall include information in relation to ESRS E4 <i>Biodiversity and Ecosystems</i> if this topic relates to material impacts, risks and opportunities to cover all the reporting areas listed in paragraph 5 of ESRS 1 <i>General Requirements</i> . If not all the sub-topics prescribed by this Standard are to be reported following the materiality assessment, paragraph 30 of ESRS 1 <i>General Requirements</i> applies.
(a) how the undertaking affects biodiversity and ecosystems, in terms of material positive and negative, actual and potential impacts, including the extent to which it contributes to the drivers of biodiversity and ecosystem loss and degradation;		
(b) any actions taken, and the result of such actions, to prevent or mitigate material negative actual or potential impacts and to protect and restore biodiversity and ecosystems, and to address risks and opportunities; and		
(c) the plans and capacity of the undertaking to adapt its strategy and business model in line with: i. respecting planetary boundaries related to biosphere integrity and land-system change ; ii. the vision of the Kunming-Montreal Global Biodiversity Framework and its <i>relevant</i> goals and targets ; iii. relevant aspects of the EU Biodiversity Strategy for 2030(77);	8. The objective of this Standard shall also enable users of the sustainability statement to understand the plans and capacity of the undertaking to adapt its strategy and business model in line with: (a) the vision of the Kunming-Montreal Global Biodiversity Framework and its <i>relevant</i> goals and targets ;	4.This Standard takes account of EU regulatory frameworks and other relevant frameworks, including the vision of the Kunming-Montreal Global Biodiversity Framework and its <i>relevant</i> goals and targets , relevant aspects of the EU Biodiversity Strategy for 2030, EU Birds and Habitats Directives (Directive 2009/147/EC of the European Parliament and of the Council and Council Directive 92/43/EEC), the Marine Strategy Framework Directive (Directive 2008/56/EC of the European Parliament and of the Council), the 2023 EU Marine Action Plan, the EU Water Framework Directive (Directive 2000/60/EC of the European Parliament), and the Nature

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
		Restoration Regulation (Regulation (EU) 2024/1991 of the European Parliament and of the Council).
iv. Directive 2009/147/EC of the European Parliament and of the Council and Council Directive 92/43/EEC (EU Birds and Habitats Directives)(78); and v. Directive 2008/56/EC of the European Parliament and of the Council (Marine Strategy Framework Directive)(79);	(b) relevant aspects of the EU Biodiversity Strategy for 2030; (c) Directive 2009/147/EC of the European Parliament and of the Council and Council Directive 92/43/EEC (EU Birds and Habitats Directives); (d) Directive 2008/56/EC of the European Parliament and of the Council (Marine Strategy Framework Directive) and the 2023 EU Marine Action Plan; and (e) Regulation (EU) 2024/1991 of the European Parliament and of the Council (Nature Restoration Regulation).	
(d) the nature, type and extent of the undertaking's material risks, dependencies and opportunities related to biodiversity and ecosystems, and how the 1. undertaking manages them; and		
(e) the financial effects on the undertaking over the short-, medium- and long-term of material risks and opportunities arising from the undertaking's impacts and dependencies on biodiversity and ecosystems.		
	2. The objective of this Standard is to specify 'DRs' in relation to these items of information mentioned in paragraph 1 that are not covered in [Draft] Amended ESRS 2.	2.The objective of this Standard is to set out Disclosure Requirements (DRs) providing information in relation to the reporting areas referred above that implement and complement the cross-cutting provisions of ESRS 1 <i>General Requirements</i> and ESRS 2 <i>General Disclosures</i> .
	3. When only one of the sub-topics covered by this Standard is material, the undertaking shall report only on that sub-topic.	
2. This Standard sets out Disclosure Requirements related to the undertaking's relationship to terrestrial, freshwater and marine habitats, ecosystems and populations of related fauna and flora species, including diversity within species, between species and of	4. This Standard sets out DRs related to biodiversity and ecosystems and in particular, with respect to the following sub-topics: drivers of biodiversity and ecosystem change (terrestrial and marine habitat change, invasive species); the state of species; the extent and	5. This Standard sets out DRs related to biodiversity and ecosystems , particularly with respect to the following closely interlinked sub-topics: drivers of biodiversity and ecosystem change ; the state of species; the condition and

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
ecosystems and their interrelation with indigenous peoples and other affected communities	condition of ecosystems and of terrestrial and marine ecosystem services.	<i>extent of terrestrial, freshwater and marine ecosystems; and ecosystem services.</i>
	5. The undertaking shall apply the provisions of [Draft] Amended ESRS 2, paragraphs 29 - 32, and GDR-P, GDR-A, GDR-T and GDR-M. In particular:	
	(a) if the undertaking has not adopted <i>policies, actions</i> and <i>targets</i> with reference to a <i>topic</i> related to material <i>impacts, risks</i> and <i>opportunities</i> , it shall disclose this fact; and	
	(b) the undertaking may present the description of its material impacts, risks and opportunities, in accordance with ESRS 2 IRO-2, alongside information about its policies, actions, targets and metrics through which it addresses them, to avoid duplication and support a coherent narrative.	
	6. In this Standard, each DRs is introduced by a disclosure objective, with the exception of <i>policies, actions</i> and <i>targets</i> , for which the provisions in [Draft] Amended ESRS 2 GDR- P, GDR- A and GDR-T provide the necessary framing for the relevant disclosures.	3. In this Standard, each DR is introduced by a disclosure objective except for <i>policies, actions</i> and <i>targets</i> , for which the provisions in ESRS 2 GDR-P, GDR-A and GDR-T provide the necessary framing for the relevant DRs.
3. The terms “biodiversity” and “biological diversity” refer to the variability among living organisms from all sources including, inter alia, terrestrial, freshwater, marine and other aquatic ecosystems and the ecological complexes of which they are part.	7. The terms “biodiversity” and “biological diversity” refer to the variability among living organisms from all sources including, inter alia, terrestrial, freshwater, marine and other aquatic ecosystems and the ecological complexes of which they are part.	6. The terms ‘ <i>biodiversity</i> ’ and ‘ <i>biological diversity</i> ’ refer to the variability among living organisms from all sources including, inter alia, terrestrial, <i>freshwater</i> , marine and other aquatic <i>ecosystems</i> and the ecological complexes of which they are part.
	9. Location-specific considerations are particularly important in relation to <i>biodiversity</i> and <i>ecosystems</i> . When material impacts, risks or opportunities arise at local level, it is important to consider appropriate disaggregation or aggregation of the reported information, for example, by <i>site</i> , asset, location, affected local ecosystem or other appropriate level in accordance with [Draft] Amended ESRS 1, paragraph 53.	7. Context-specific considerations are particularly important in relation to <i>biodiversity</i> and <i>ecosystems</i> . If material <i>impacts, risks</i> or <i>opportunities</i> are related to specific <i>geographies</i> , it is important to consider appropriate aggregation or disaggregation of the reported information, e.g. by <i>site</i> , ecosystem or another level in

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
		accordance with ESRS 1 <i>General Requirements</i> , Chapter 3.3.2 <i>Level of Aggregation, Disaggregation</i> .
Interactions with other ESRS	Interactions with other ESRS	Interactions with other ESRS
4. 'Biodiversity and ecosystems' are closely connected to other environmental matters. The main direct drivers of biodiversity and ecosystems change are climate change, pollution, land-use change, freshwater-use change and sea-use change, direct exploitation of organisms and invasive alien species. These drivers are covered in this standard, except for climate change (covered by ESRS E1) and pollution (covered by ESRS E2).	10. Social and environmental topics closely interact with each other. For instance, direct drivers of biodiversity and ecosystems change are climate change , pollution , land-use change, freshwater -use change and sea-use change, direct exploitation of organisms and invasive alien species . These drivers are covered in this Standard, except for climate change and pollution which are addressed by [Draft] Amended ESRS E1 <i>Climate Change</i> and [Draft] Amended ESRS E2 <i>Pollution</i> . The main points of interaction between ESRS E4 <i>Biodiversity and ecosystems</i> and the different ESRS topical standards are the following:	8. Social and environmental topics interact with each other. For instance, direct drivers of biodiversity and ecosystem change are climate change , pollution , land-use change, freshwater -use change and sea-use change, direct exploitation of organisms and invasive alien species . These drivers are covered in ESRS E4 <i>Biodiversity and Ecosystems</i> except for climate change and pollution, which are addressed by ESRS E1 <i>Climate Change</i> and ESRS E2 <i>Pollution</i> . The main points of interaction between ESRS E4 <i>Biodiversity and Ecosystems</i> and the other topical standards are the following.
5. To obtain a comprehensive understanding of material impacts and dependencies on biodiversity and ecosystems, the Disclosure Requirements of other environmental ESRS should be read and interpreted in conjunction with the specific disclosure requirements of this Standard. The relevant disclosure requirements covered in other environmental ESRS are:		
(a) ESRS E1 Climate change, which addresses GHG emissions and energy resources (energy consumption);	(a) [Draft] Amended ESRS E1 <i>Climate change</i> addresses greenhouse gas ('GHG') emissions and energy resources (energy consumption), while impacts of climate change on biodiversity and ecosystems are addressed in E4;	(a) ESRS E1 <i>Climate Change</i> addresses climate change mitigation, climate change adaptation and energy, whereas impacts on biodiversity and ecosystems related to the undertaking's activities addressing climate mitigation and adaptation are addressed in ESRS E4 <i>Biodiversity and Ecosystems</i> .
(b) ESRS E2 Pollution, which addresses pollution to air, water and soil;	(b) [Draft] Amended ESRS E2 <i>Pollution</i> addresses the emissions of pollutants to air, water and soil and the use, generation and emission of microplastics, while impacts of pollution on biodiversity and ecosystems are addressed in E4;	(b) ESRS E2 <i>Pollution</i> addresses the emission of pollutants to air, water and soil and the manufacturing, use and release of microplastics , whereas impacts of pollution on biodiversity and ecosystems are addressed in ESRS E4 <i>Biodiversity and Ecosystems</i> .

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(c) ESRS E3 Water which addresses the management of water resources;	(c) [Draft] Amended ESRS E3 <i>Water</i> addresses the use of water resources, while impacts on biodiversity and ecosystems related to the use of water are addressed in E4;	(c) ESRS E3 <i>Water</i> addresses the use of water, whereas impacts on biodiversity and ecosystems related to the use of water are addressed in ESRS E4 <i>Biodiversity and Ecosystems</i> .
(d) ESRS E5 Resource use and circular economy addresses the transition away from extraction of non-renewable resources and the implementation of practices that prevent waste generation.	(d) [[Draft] Amended ESRS E5 <i>Resource use and circular economy</i> addresses the type and quantification of resource inflows, waste and the implementation of circular economy principles, while the impacts on biodiversity and ecosystems of these topics are addressed in E4; and	(d) ESRS E5 <i>Resource Use and Circular Economy</i> addresses the type and circularity of resource inflows , including marine resources, waste and the implementation of circular economy principles , whereas the impacts on biodiversity and ecosystems related to these topics are addressed in ESRS E4 <i>Biodiversity and Ecosystems</i> .
6. The undertaking's impacts on biodiversity and ecosystems affect people and communities. When reporting on material negative impacts on affected communities from biodiversity and ecosystem change under ESRS E4, the undertaking shall consider the requirements of ESRS S3 Affected communities.	(e) [Draft] Amended ESRS S3 <i>Affected communities</i> addresses material negative impacts on affected communities from biodiversity and ecosystems-related impacts attributable to the undertaking.	(e) ESRS S3 <i>Affected Communities</i> addresses material negative impacts on affected communities arising from biodiversity and ecosystems-related impacts attributable to the undertaking.
7. This Standard should be read in conjunction with ESRS 1 <i>General requirements</i> and ESRS 2 <i>General disclosures</i> .		
8. The requirements of this section shall be read in conjunction with the disclosures required by ESRS 2 <i>Chapter 2 Governance, Chapter 3 Strategy and Chapter 4 Impact, risk and opportunity management</i> .		
9. The resulting disclosures shall be presented alongside the disclosures required by ESRS 2, except for ESRS 2 SBM-3, for which the undertaking has an option to present the disclosures alongside the topical disclosures.		
10. In addition to the requirements in ESRS 2, this Standard also includes the topic specific Disclosure Requirement E4-1 <i>Transition plan and consideration of biodiversity and ecosystems in strategy and business model</i> .		
Disclosure Requirement	Disclosure Requirements	Disclosure Requirements
Strategy	Strategy	Strategy
Disclosure Requirement E4-1 – Transition plan and consideration of biodiversity and ecosystems in	Disclosure Requirement E4-1 – Transition plan for biodiversity and ecosystems	Disclosure Requirement E4-1 – Biodiversity and ecosystems transition plan

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
<i>strategy and business model</i>		
11. The undertaking shall disclose how its biodiversity and ecosystem impacts, dependencies, risks and opportunities originate from and trigger adaptation of its strategy and business model.		
12. The objective of this Disclosure Requirement is to enable an understanding of the resilience of the undertaking's strategy and business model in relation to biodiversity and ecosystems, and of the compatibility of the undertaking's strategy and business model with regard to relevant local, national and global public policy targets related to biodiversity and ecosystems.	11. The objective of this DR is to enable an understanding of the undertaking's response and contribution to the transition implied by the Global Biodiversity Framework, when it has in place a <i>biodiversity and ecosystems transition plan</i> .	9. The objective of this DR is to enable an understanding of the undertaking's response and contribution to the transition implied by the Kunming-Montreal Global Biodiversity Framework (GBF) if it has in place a <i>biodiversity and ecosystems transition plan</i> and has made public its key features.
13. The undertaking shall describe the resilience of its strategy and business model in relation to biodiversity and ecosystems. The description shall include:		
(a) an assessment of the resilience of the current business model and strategy to biodiversity and ecosystems-related physical, transition and systemic risks;		
(b) the scope of the resilience analysis in relation to the undertaking's own operations and its upstream and downstream value chain and in relation to the risks considered in that analysis;		
(c) the key assumptions made;		
(d) the time horizons used;		
(e) the results of the resilience analysis; and		
(f) the involvement of stakeholders, including, where appropriate, holders of indigenous and local knowledge.		
14. If information specified in this disclosure requirement is disclosed by the undertaking as part of the information required under ESRS 2 SBM-3, the undertaking may refer to the information it has disclosed under ESRS 2 SBM-3.		
15. The undertaking may disclose its transition plan to improve and, ultimately, achieve alignment of its business model and strategy with the vision of the Kunming-	12. If the undertaking has in place and has made public a biodiversity and ecosystems <i>transition plan</i> to transform its <i>business model</i> and strategy so it is aligned with the	10. If the undertaking has in place a <i>biodiversity and ecosystems transition plan</i> to transform its <i>business model</i> and strategy so that it contributes to the global

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
Montreal Global Biodiversity Framework and its relevant goals and targets, the EU Biodiversity Strategy for 2030, and with respecting planetary boundaries related to biosphere integrity and land-system change.	global goal of halting and reversing biodiversity loss as stated in the Kunming-Montreal Global Biodiversity Framework, it shall disclose its key features.	goal of halting and reversing biodiversity loss , as stated in the GBF, and it has made public the key features of such plan, it shall disclose those features.
SBM-3 - Material impacts, risks and opportunities and their interaction with strategy and business model		
16. The undertaking shall disclose:		
<p>(a) list of material sites in its own operations, including sites under its operational control, based on the results of paragraph 17(a). The undertaking shall disclose these locations by:</p> <ul style="list-style-type: none"> i. specifying the activities negatively affecting biodiversity sensitive areas (73); ii. providing a breakdown of sites according to the impacts and dependencies identified, and to the ecological status of the areas (with reference to the specific ecosystem baseline level) where they are located; and iii. specifying the biodiversity- sensitive areas impacted, for users to be able to determine the location and the responsible competent authority with regards to the activities specified in paragraph 16(a) i. 	<p>20. The undertaking shall disclose the following information for material biodiversity and ecosystem change -related impacts, risks or opportunities:</p> <ul style="list-style-type: none"> (a) (16(a)(ii) amended) the locations in its own operations to which the material impact, risks or opportunities relate; (b) (16(a)(iii) amended) for those locations, if applicable, a list of biodiversity-sensitive area(s) negatively affected (name and type); and (c) (16(a)(i) amended) for (b) above, the activities negatively affecting those biodiversity-sensitive areas. 	<p>18. The undertaking shall disclose the following information for material biodiversity and ecosystem change-related impacts, risks or opportunities:</p> <ul style="list-style-type: none"> (a) the locations in its own operations to which the material impacts, risks or opportunities relate; (b) for those locations, a list of biodiversity-sensitive area(s) (name and type) related to the undertaking's material negative impacts, if any; and (c) the undertaking's activities that are related to material negative impacts on the biodiversity-sensitive areas described in (b) above.
(b) whether it has identified material negative impacts with regards to land degradation, desertification or soil sealing; and	AR 6. When providing description of material impacts, risks and opportunities in accordance with [Draft] Amended ESRS 2 IRO-2 the undertaking shall indicate which material impacts concern (16(b) amended) land degradation, desertification or soil sealing, and (16(c) amended) operations that affect threatened species .	AR 9 for para. 19 (Metrics related to biodiversity and ecosystems change). When providing the description of material impacts in accordance with ESRS 2 IRO-2, the undertaking shall indicate which material impacts concern land degradation, desertification or soil sealing and operations that affect threatened species or ecosystems .
(c) whether it has operations that affect threatened species.		
Disclosure Requirement related to ESRS 2 IRO-1 – Description of processes to identify and assess material biodiversity and ecosystem-related impacts, risks, dependencies and opportunities		
17. The undertaking shall describe its process to identify material impacts, risks, dependencies and opportunities.		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
The description of the process shall include whether and how the undertaking:		
(a) identified and assessed actual and potential impacts on biodiversity and ecosystems at own site locations and in the upstream and downstream value chain, including assessment criteria applied;		
(b) identified and assessed dependencies on biodiversity and ecosystems and their services at own site locations and in the upstream and downstream value chain, including assessment criteria applied, and, if this assessment includes ecosystem services that are disrupted or likely to be;		
(c) identified and assessed transition and physical risks and opportunities related to biodiversity and ecosystems, including assessment criteria applied based on its impacts and dependencies;		
(d) considered systemic risks;		
(e) conducted consultations with affected communities on sustainability assessments of shared biological resources and ecosystems and, in particular: <ul style="list-style-type: none"> i. when a site, a raw material production or sourcing is likely to negatively impact biodiversity and ecosystems, the identification of the specific sites, raw materials production or sourcing with negative or potentially negative impacts on affected communities; ii. when affected communities are likely to be impacted, the undertaking, shall disclose how these communities were involved in the materiality assessment; and iii. with respect to impacts on ecosystem services of relevance to 		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
affected communities in its own operations, the undertaking shall indicate how negative impacts may be avoided. If these impacts are unavoidable, the undertaking may indicate its plans to minimise them and implement mitigation measures that aim to maintain the value and functionality of priority services.		
18. The undertaking may disclose whether and how it has used biodiversity and ecosystems scenario analysis to inform the identification and assessment of material risks and opportunities over short-, medium- and long-term time horizons. If the undertaking has used such scenario analysis, it may disclose the following information:	AR 4 for para. 13 (Policies related to biodiversity and ecosystems) Biodiversity and ecosystems <i>scenario analysis</i> can inform the identification, assessment and management of material <i>risks</i> and <i>opportunities</i> over short, medium and long-term time horizons. The undertaking can consider the use of scenario analysis when defining its <i>policies, actions</i> and <i>targets</i> .	AR 4 for para. 11 (Policies related to biodiversity and ecosystems). <i>Biodiversity</i> and <i>ecosystems scenario analysis</i> can inform the identification, assessment and management of material <i>risks</i> and <i>opportunities</i> over short-, medium- and long-term time horizons. The undertaking can consider the use of scenario analysis when defining its <i>policies, actions</i> and <i>targets</i> .
(a) why the considered scenarios were selected;		
(b) how the considered scenarios are updated according to evolving conditions and emerging trends; and		
(c) whether the scenarios are informed by expectations published by authoritative intergovernmental bodies, such as the Convention for Biological Diversity and, where relevant, by scientific consensus, such as that expressed by the Intergovernmental Science-policy Platform on Biodiversity and Ecosystem Services (IPBES).		
19. The undertaking shall specifically disclose:		
(a) whether or not it has sites located in or near biodiversity-sensitive areas and whether activities related to these sites negatively affect these areas by leading to the deterioration of natural habitats and the habitats of species and to the disturbance of the species for which a protected area has been designated; and		
(b) whether it has been concluded that it is necessary to implement biodiversity mitigation measures, such as		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
those identified in: Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds; Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora; an Environmental Impact Assessment (EIA) as defined in Article 1(2), point (g), of Directive 2011/92/EU of the European Parliament and of the Council ⁷ on the assessment of the effects of certain public and private projects on the environment; and for activities located in third countries, in accordance with equivalent national provisions or international standards, such as the International Finance Corporation (IFC) Performance Standard 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources.		
Impact, risk and opportunity management		
Disclosure Requirement E4-2 – Policies related to biodiversity and ecosystems	Disclosure Requirement E4-2 – Policies related to biodiversity and ecosystems	Disclosure Requirement E4-2 – Policies related to biodiversity and ecosystems
20. The undertaking shall describe its adopted policies to manage its material impacts, risks, dependencies, and opportunities related to biodiversity and ecosystems.		
21. The objective of this Disclosure Requirement is to enable an understanding of the extent to which the undertaking has policies that address the identification, assessment, management and/or remediation of its material biodiversity and ecosystem -related impacts, dependencies, risks and opportunities .		
22. The disclosure required by paragraph 20 shall contain the information on the policies the undertaking has in place to manage its material impacts, risks, dependencies and opportunities related to biodiversity and ecosystems in accordance with <i>ESRS 2 MDR-P Policies adopted to manage material sustainability matters</i>).	13. The undertaking shall disclose its biodiversity and ecosystems policies in accordance with the provisions of [Draft] Amended ESRS 2 GDR-P.	11. The undertaking shall disclose its biodiversity and ecosystems policies in accordance with the provisions of ESRS 2 GDR-P.

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
23. In addition to the provisions of ESRS 2 MDR-P the undertaking shall describe whether and how its biodiversity and ecosystems -related policies :	14. In addition to the provisions of [Draft] Amended ESRS 2 GDR-P the undertaking shall describe the content of its biodiversity and ecosystems -related policies related to:	12. In addition to the provisions of ESRS 2 GDR-P, the undertaking shall describe the content of its biodiversity and ecosystems -related policies with respect to:
(a) relate to the matters specified in ESRS E4 AR 4;		
(b) relate to its material biodiversity and ecosystems-related impacts;		
(c) relate to material dependencies and material physical and transition risks and opportunities;		
(d) support traceability of products, components and raw materials with material actual or potential impacts on biodiversity and ecosystems along the value chain;	(a) supporting traceability of products, components and raw materials with material actual or potential impacts on biodiversity and ecosystems along the upstream and downstream value chain ;	(a) supporting the traceability of products , components and raw materials that have actual or potential material impacts on biodiversity and ecosystems in its value chain ; and
(e) address production, sourcing or consumption from ecosystems that are managed to maintain or enhance conditions for biodiversity, as demonstrated by regular monitoring and reporting of biodiversity status and gains or losses; and		
(f) address social consequences of biodiversity and ecosystems-related impacts.		
24. The undertaking shall specifically disclose whether it has adopted:		
(a) biodiversity and ecosystem protection policy covering operational sites owned, leased, or managed in or near a biodiversity sensitive area ;	(b) sites in its own operations that are in or near a biodiversity sensitive area .	(b) sites in its own operations in or near a biodiversity-sensitive area .
(b) sustainable land / agriculture practices or policies;	AR 3 for para. 13 (Policies related to biodiversity and ecosystems) When describing the content of its policies the undertaking shall specify, where relevant, whether they address (24(b) amended) sustainable land / agricultural practices; (24(c) amended) sustainable oceans / seas practices; and (24(d) amended) deforestation.	AR 3 for para. 11 (Policies related to biodiversity and ecosystems) . When describing the content of its policies , the undertaking shall specify, where applicable, whether they address sustainable land or agricultural practices; sustainable oceans or seas practices; or deforestation.
(c) sustainable oceans / seas practices or policies; and		
(d) policies to address deforestation .		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
Disclosure Requirement E4-3 – Actions and resources related to biodiversity and ecosystems	Disclosure Requirement E4-3 – Actions and resources related to biodiversity and ecosystems	Disclosure Requirement E4-3 – Actions and resources related to biodiversity and ecosystems
25. The undertaking shall disclose its biodiversity and ecosystems-related actions and the resources allocated to their implementation.		
26. The objective of this Disclosure Requirement is to enable an understanding of the key actions taken and planned that significantly contribute to the achievement of biodiversity and ecosystems -related policy objectives and targets .		
27. The description of key actions and resources shall follow the mandatory content defined in ESRS 2 MDR-A Actions and resources in relation to material sustainability matters .	15. The undertaking shall disclose its key biodiversity and ecosystems - related actions and significant resources allocated to their implementation, in accordance with the provisions of [Draft] Amended ESRS 2 GDR-A.	13. The undertaking shall disclose its key biodiversity - and ecosystems -related actions and resources allocated to their implementation in accordance with the provisions of ESRS 2 GDR-A.
28. In addition, the undertaking:		
(a) may disclose how it has applied the mitigation hierarchy with regard to its actions (avoidance, minimisation, restoration/rehabilitation, and compensation or offsets);		
(b) shall disclose whether it used biodiversity offsets in its action plans. If the actions contain biodiversity offsets, the undertaking shall include the following information: <ul style="list-style-type: none"> i. the aim of the offset and key performance indicators used; ii. the financing effects (direct and indirect costs) of biodiversity offsets in monetary terms; and iii. a description of offsets including area, type, the quality criteria applied and the standards that the biodiversity offsets comply with; 	16. In addition, the undertaking shall describe the biodiversity offsets used in its action plans, if any, including the aim of the offsets, the financing effects in monetary terms, area, type, the quality criteria applied and the standards that the biodiversity offsets comply with.	14. In addition to the provisions of ESRS 2 GDR-A, the undertaking shall describe any biodiversity offsets used as part of its actions , including the aim of the offsets, the financing effects in monetary terms, the area, type and quality criteria applied, and the standards with which the biodiversity offsets comply.
(c) shall describe whether and how it has incorporated local and indigenous knowledge and nature- based solutions into biodiversity and ecosystems -related actions.		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
Metrics and Targets	Metrics and Targets	Metrics and Targets
Disclosure Requirement E4-4 – Targets related to biodiversity and ecosystems	Disclosure Requirement E4-4 – Targets related to biodiversity and ecosystems	Disclosure Requirement E4-4 – Targets related to biodiversity and ecosystems
29. The undertaking shall disclose the biodiversity and ecosystem-related targets it has set.		
30. The objective of this Disclosure Requirement is to allow an understanding of the targets the undertaking has adopted to support its biodiversity and ecosystems policies and address its material related impacts, dependencies, risks and opportunities .		
31. The description of the targets shall follow the mandatory content defined in ESRS 2 MDR-T <i>Tracking effectiveness of policies and actions through targets</i> .	17. The undertaking shall disclose its biodiversity and ecosystems targets , in accordance with the provisions of [Draft] Amended ESRS 2 GDR-T.	15. The undertaking shall disclose its biodiversity and ecosystems targets in accordance with the provisions of ESRS 2 GDR-T.
32. The disclosure required by paragraph 29 shall include the following information:		
(a) whether ecological thresholds and allocations of impacts to the undertaking were applied when setting targets. If so, the undertaking shall specify: <ul style="list-style-type: none"> i. the ecological thresholds identified and the methodology used to identify such thresholds; ii. whether or not the thresholds are entity-specific and if so, how they were determined; and iii. how responsibility for respecting identified ecological thresholds is allocated in the undertaking; 		
(b) whether the targets are informed by, and/or aligned with the Kunming-Montreal Global Biodiversity Framework, relevant aspects of the EU Biodiversity Strategy for 2030 and other biodiversity and ecosystem-related national policies and legislation;		
(c) how the targets relate to the biodiversity and ecosystem impacts, dependencies, risks and opportunities identified by the undertaking in relation to		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
its own operations and its upstream and downstream value chain;		
(d) the geographical scope of the targets, if relevant;		
(e) whether or not the undertaking used biodiversity offsets in setting its targets; and	18. If the undertaking uses biodiversity offsets in setting its targets , the DR required by paragraph 17 shall include how it used them.	16. If the undertaking uses biodiversity offsets in setting its targets , it shall disclose how these offsets were used.
(f) to which of the layers of the mitigation hierarchy the target can be allocated (i.e., avoidance, minimisation, restoration and rehabilitation, compensation or offsets).		
Disclosure Requirement E4-5 – Impact metrics related to biodiversity and ecosystems change	Disclosure Requirement E4-5 – Metrics related to biodiversity and ecosystems change	Disclosure Requirement E4-5 – Metrics related to biodiversity and ecosystems change
33. The undertaking shall report metrics related to its material impacts on biodiversity and ecosystems.		
34. The objective of this Disclosure Requirement is to enable an understanding of the performance of the undertaking against impacts identified as material in the materiality assessment on biodiversity and ecosystems change.	19. The objective of this DR is to enable an understanding of the performance of the undertaking against material biodiversity and ecosystems change-related impacts , risks and opportunities .	17. The objective of this DR is to enable an understanding of the performance of the undertaking against material biodiversity and ecosystems change-related impacts , risks and opportunities .
35. If the undertaking identified sites located in or near biodiversity-sensitive areas that it is negatively affecting (see paragraph 19(a)), the undertaking shall disclose the number and area (in hectares) of sites owned, leased or managed in or near these protected areas or key biodiversity areas.		(location-specific datapoints can be found in para. 18 of E4-5)
36. If the undertaking has identified material impacts with regards to land-use change, or impacts on the extent and condition of ecosystems, it may also disclose their land-use based on a Life Cycle Assessment.		
37. For datapoints specified in paragraphs 38 to 41, the undertaking shall consider its own operations.		
38. If the undertaking has concluded that it directly contributes to the impact drivers of land-use change, freshwater-use change and/or sea-use change, it shall	21. In addition to paragraph 20 and in accordance with [Draft] Amended ESRS 2 GDR-M, the undertaking shall report metrics related to its material impacts on biodiversity and ecosystems.	19. In addition to paragraph 18, and in accordance with ESRS 2 GDR-M, the undertaking shall report metrics related to its material impacts on biodiversity and ecosystems .

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
report relevant metrics. The undertaking may disclose metrics that measure:		
(a) the conversion over time (e.g. 1 or 5 years) of land cover (e.g. deforestation or mining);		
(b) changes over time (e.g. 1 or 5 years) in the management of the ecosystem (e.g., through the intensification of agricultural management, or the application of better management practices or forestry harvesting);		
(c) changes in the spatial configuration of the landscape (e.g. fragmentation of habitats, changes in ecosystem connectivity);		
(d) changes in ecosystem structural connectivity (e.g. habitat permeability based on physical features and arrangements of habitat patches); and		
(e) the functional connectivity (e.g. how well genes or individuals move through land, freshwater and seascape).		
39. If the undertaking concluded that it directly contributes to the accidental or voluntary introduction of invasive alien species, the undertaking may disclose the metrics it uses to manage pathways of introduction and spread of invasive alien species and the risks posed by invasive alien species		
40. If the undertaking identified material impacts related to the state of species, the undertaking may report metrics it considers relevant. The undertaking may:		
(a) refer to relevant disclosure requirements in ESRS E1, ESRS E2, ESRS E3, and ESRS E5;		
(b) consider population size, range within specific ecosystems as well as extinction risk. These aspects provide insight on the health of a single species' population and its relative resilience to human induced and naturally occurring change;		
(c) disclose metrics that measure changes in the number of individuals of a species within a specific area;		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(d) disclose metrics on species at extinction risk that measure: i. the threat status of species and how activities/pressures may affect the threat status; or		
ii. changes in the relevant habitat for a threatened species as a proxy for the undertaking's impact on the local population's extinction risk.		
41. If the undertaking identified material impacts related to ecosystems, it may disclose:		
(a) with regard to ecosystems extent, metrics that measure area coverage of a particular ecosystem without necessarily considering the quality of the area being assessed, such as habitat cover. For example, forest cover is a measure of the extent of a particular ecosystem type, without factoring in the condition of the ecosystem (e.g., provides the area without describing the species diversity within the forest).		
(b) with regard to ecosystems condition: i. metrics that measure the quality of ecosystems relative to a pre-determined reference state; ii. metrics that measure multiple species within an ecosystem rather than the number of individuals within a single species within an ecosystem (for example: scientifically established species richness and abundance indicators that measure the development of (native) species composition within an ecosystem against the reference state at the beginning of the first reporting period as well as the targeted state outlined in the Kunming-Montreal Global Biodiversity Framework, or an aggregation of species' conservation status if relevant); or iii. metrics that reflect structural components of condition such as habitat connectivity (i.e., how linked habitats are to each other).		
Disclosure Requirement E4-6 – Anticipated financial		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
effects from material biodiversity and ecosystem- related risks and opportunities		
42. The undertaking shall disclose its anticipated financial effects of material biodiversity- and ecosystem-related risks and opportunities.		
43. The information required by paragraph 42 is in addition to the information on current financial effects on the entity's financial position, financial performance and cash flows for the reporting period required under ESRS 2 SBM-3 para 48 (d).		
44. The objective of this Disclosure Requirement is to provide an understanding of:		
(a) anticipated financial effects due to material risks arising from biodiversity- and ecosystem-related impacts and dependencies and how these risks have (or could reasonably be expected to have) a material influence on the undertaking's financial position, financial performance and cash flows over the short-, medium- and long-term; and		
(b) anticipated financial effects due to material opportunities related to biodiversity- and ecosystem.		
45. The disclosure shall include:		
(a) a quantification of the anticipated financial effects in monetary terms before considering biodiversity and ecosystems -related actions or where not possible without undue cost or effort, qualitative information. For financial effects arising from material opportunities, a quantification is not required if it would result in disclosure that does not meet the qualitative characteristics of information (see ESRS 1 Appendix B <i>Qualitative characteristics of information</i>). The quantification of the anticipated financial effects in monetary terms may be a single amount or a range;		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(b) a description of the effects considered, the impacts and dependencies to which they relate and the time horizons in which they are likely to materialise; and		
(c) the critical assumptions used to quantify the anticipated financial effects as well as the sources and the level of uncertainty of those assumptions.		
Appendix A Application Requirements		
Strategy		
Disclosure Requirement E4-1 – Transition plan and consideration of biodiversity and ecosystems in strategy and business model	Disclosure Requirement E4-1 – Transition plan for biodiversity and ecosystems	Disclosure Requirement E4-1 – Transition plan for biodiversity and ecosystems
	AR 1 for para. 12 (Transition plan for biodiversity and ecosystems) Transition plans for biodiversity and ecosystems are expected to address similar elements than transition plans for climate change mitigation. This includes information on targets, key actions, financial planning, governance of the plan – but also a clear explanation of how the undertaking’s strategy and business model will evolve to become compatible with relevant global goals, such as halting and reversing global biodiversity loss in line with the GBF.	
AR 1. If disclosing a transition plan, the undertaking may:		AR 1 for para. 10 (Biodiversity and ecosystems transition plan). Biodiversity can also be part of an undertaking’s broader transition plan that, for instance, addresses climate change. Biodiversity and ecosystems transition plans , or plans that integrate biodiversity, contain information on targets , key actions, financial planning and governance. They are also expected to include a clear explanation of how the undertaking’s strategy and business model will evolve to contribute to the global goal of halting and reversing global biodiversity loss set out in the GBF and can include the identification and management of synergies and trade-offs with other transition plan objectives, including any response and

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
		contribution to the transition implied by the Paris Agreement.
(a) explain how it will adjust its strategy and business model to improve and, ultimately, achieve alignment with relevant local, national and global public policy goals and targets related to biodiversity and ecosystems including the vision of the Kunming-Montreal Global Biodiversity Framework and its relevant goals and targets, the EU Biodiversity Strategy for 2030, and Directive 2009/147/EC Council Directive 92/43/EEC (the EU Birds and Habitats Directives) and, as appropriate, planetary boundaries related to biosphere integrity and land-system change ;		
(b) include information about its own operations and also explain how it is responding to material impacts in its upstream and downstream value chain identified in its materiality assessment in accordance with ESRS 2 IRO-1 Description of the processes to identify and assess material impacts, risks and opportunities;		
(c) explain how its strategy interacts with its transition plan;		
(d) explain how it contributes to addressing biodiversity and ecosystem impact drivers and its possible mitigation actions following the mitigation hierarchy and the main path-dependencies and locked-in assets and resources (e.g., plants, raw materials) that are associated with biodiversity and ecosystems change;		
(e) explain and quantify its investments and funding supporting the implementation of its transition plan, with a reference to the key performance indicators of taxonomy-aligned CapEx, and where relevant the CapEx plans, that the undertaking discloses in accordance with Commission Delegated Regulation (EU) 2021/2178;		
(f) if it has economic activities that are covered by delegated regulations on biodiversity under the		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
Taxonomy Regulation, explain any objective or plans (CapEX, CapEX plans) that it has for aligning its economic activities (revenues, CapEX) with the criteria established in those delegated regulations;		
(g) explain how biodiversity offsets are used as part of the transition plan, and if so, where the offsets are planned to be used, the extent of use in relation to the overall transition plan, and whether the mitigation hierarchy was considered;		
(h) explain how the process of implementing and updating the transition plan is managed;		
(i) explain how it measures progress, namely indicate the metrics and methodologies it uses for that purpose;		
(j) indicate whether the administrative, management and supervisory bodies have approved the transition plan; and		
(k) indicate current challenges and limitations to draft a plan in relation to areas of significant impact and how the company is addressing those challenges.		
		AR 2 for para 10. (Biodiversity and ecosystems transition plan) ‘Has made public’ means that the undertaking has made the key features of its biodiversity and ecosystems transition plan available before or at the time of the release of its sustainability statement , through accessible public channels such as its website or reports.
AR 2. If disclosing a transition plan, the undertaking may, for example, refer to the following targets from the EU Biodiversity Strategy for 2030:		
(a) The decline of pollinators is reversed.		
(b) The risk and use of chemical pesticides is reduced by 50%, and the use of more hazardous pesticides is reduced by 50%.		
(c) At least 25% of agricultural land is under organic farming management, and the uptake of agro-ecological practices is significantly increased.		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(d) Three billion additional trees are planted in the EU, in full respect of ecological principles.		
(e) Significant progress in the remediation of contaminated soil sites.		
(f) At least 25 000 km of free-flowing rivers are restored.		
(g) The losses of nutrients from fertilisers are reduced by 50%, resulting in the reduction of the use of fertilisers by at least 20%.		
(h) The negative impacts on sensitive species and habitats, including on the seabed through fishing and extraction activities, are substantially reduced to achieve good environmental status.		
AR 3. If disclosing a transition plan, the undertaking may also refer to the Sustainable Development Goals, in particular:		
(a) SDG 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture;		
(b) SDG 6 - Ensure availability and sustainable management of water and sanitation for all;		
(c) SDG 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development; and		
(d) SDG 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.		
AR 4. The materiality assessment under ESRS E4 includes the undertaking's:		
(a) contribution to direct impact drivers on biodiversity loss:		
i. climate change;		
ii. land-use change (e.g., land artificialisation), freshwater-use change and sea-use change;		
iii. direct exploitation;		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
iv. invasive alien species; v. pollution; and vi. others.		
(b) impacts on the state of species (i.e., species population size, species global extinction risk);		
(c) impacts on the extent and condition of ecosystems including through land degradation, desertification and soil sealing); and		
(d) impacts and dependencies on ecosystem services.		
AR 5. When assessing the materiality of impacts, dependencies, risks and opportunities the undertaking shall consider the provisions in ESRS 2 IRO-1 and ESRS 1 Chapter 3 Double materiality as the basis for sustainability disclosures and describe its considerations.		
AR 6. The undertaking shall assess the materiality of biodiversity and ecosystems in its own operations and its upstream and downstream value chain , and may conduct its materiality assessment in line with the first three phases of the LEAP approach: Locate (paragraph AR 7), Evaluate (paragraph AR 8) and Assess (paragraph AR 9).		
AR 7. Phase 1 relates to the localisation of relevant sites regarding its interface with biodiversity and ecosystems. To identify these relevant sites the undertaking may:		
(a) develop a list of locations of direct assets and operations and related upstream and downstream value chain that are relevant to the undertakings business activities. Furthermore, the undertaking may provide information about sites for which future operations have been formally announced;		
(b) list the biomes and ecosystems it is interfacing with based on the list of locations identified under paragraph AR 7(a);		
(c) identify the current integrity and importance of biodiversity and ecosystem at each location taking into		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
consideration the information provided in paragraphs 16 and 17;		
(d) develop a list of locations where the undertaking is interfacing with locations in or near biodiversity-sensitive areas taking into consideration the information provided in paragraphs 16 and 17; and		
(e) identify which sectors, business units, value chains or asset classes are interfacing with biodiversity and ecosystems in these material sites. Instead of identifying these interfaces per site, the undertaking may choose to identify them per raw material procured or sold by weight in tons, if such practice offers greater transparency.		
AR 8. In Phase 2, to evaluate its actual or potential impacts and dependencies on biodiversity and ecosystems for relevant sites, the undertaking may:		
(a) identify business processes and activities that interface with biodiversity and ecosystems;		
(b) identify actual and potential impacts and dependencies;		
(c) indicate the size, scale, frequency of occurrence and timeframe of the impacts on biodiversity and ecosystems taking into consideration the disclosures under paragraphs 16 and 17. Furthermore, the undertaking may disclose: <ul style="list-style-type: none"> i. the percentage of its suppliers' facilities which are located in risk prone areas (with threatened species on the IUCN Red List of Species, the Birds and Habitats Directive or nationally list of threatened species, or in officially recognised Protected Areas, the Natura 2000 network of protected areas and Key Biodiversity Areas); ii. the percentage of its procurement spend from suppliers with facilities which are located in risk prone areas (with threatened species on the IUCN Red List of Species, the Birds and Habitats Directive or nationally list 		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
of threatened species, or in officially recognised Protected Areas, the Natura 2000 network of protected areas and Key Biodiversity Areas); and		
(d) indicate the size and scale of the dependencies on biodiversity and ecosystems, including on raw materials, natural resources and ecosystem services. The undertaking may rely on the international classifications such as the Common International Classification of Ecosystem Services (CICES).		
AR 9. In Phase 3, to assesses its material risks and opportunities based on the results of Phases 1 and 2, the undertaking may consider the following categories:		
<p>(a) physical risks:</p> <p>i. acute risks (e.g., natural disasters exacerbated by loss of coastal protection from ecosystems, leading to costs of storm damage to coastal infrastructure, disease or pests affecting the species or variety of crop the undertaking relies on, especially in the case of no or low genetic diversity, species loss and ecosystem degradation); and</p> <p>ii. chronic risks (e.g., loss of crop yield due to decline in pollination services, increasing scarcity or variable production of key natural inputs, ecosystem degradation due to operations leading to, for example, coastal erosion and forest fragmentation, ocean acidification, land loss to desertification and soil degradation and consequent loss of soil fertility, species loss).</p>		
<p>(b) transition risks, including:</p> <p>i. policy and legal: e.g. introduction of regulation or policy (e.g. changes such as increased land protection); exposure to sanctions and litigation (e.g. spills of polluting effluents that damage human and ecosystem health; or violation of biodiversity-related rights, permits or allocations; or negligence towards or killing of threatened species); enhanced reporting obligations on biodiversity, ecosystems and related services;</p>		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
<p>ii. technology: e.g. substitution of products or services by products or services with a lower impact on biodiversity or dependence on ecosystem services, lack of access to data or access to poor quality data that hamper biodiversity-related assessments, transition to more efficient and cleaner technologies (i.e. with lower impacts on biodiversity), new monitoring technologies (e.g. satellite), requirements to use certain technologies (e.g. climate resistant crops, mechanical pollinators, water purification, flood protection);</p> <p>iii. market: e.g., shifting supply, demand and financing, volatility or increased costs of raw materials (e.g., biodiversity-intense inputs for which price has risen due to ecosystem degradation);</p> <p>iv. reputation: e.g., changing societal, customer or community perceptions as a result of an organisation's role in loss of biodiversity, violation of nature-related rights through operations, negative media coverage due to impacts on critical species and/or ecosystems, biodiversity-related social conflicts over endangered species, protected areas, resources or pollution.</p>		
<p>(c) systemic risks, including:</p> <p>i. ecosystem collapse risks that a critical natural system no longer functions, e.g., tipping points are reached and the collapse of ecosystems resulting in wholesale geographic or sector losses (summing physical risks);</p> <p>ii. aggregated risk linked to fundamental impacts of biodiversity loss to levels of transition and physical risk across one or more sectors in a portfolio (corporate or financial); and</p> <p>iii. contagion risks that financial difficulties of certain corporations or financial institutions linked to failure to account for exposure to biodiversity-related risks spill over to the economic system as a whole.</p>		
(d) opportunities, including for example:		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
i. business performance categories: resource efficiency; products and services; markets; capital flow and financing; reputational capital; and ii. sustainability performance categories: ecosystem protection, restoration and regeneration; sustainability use of natural resources.		
AR 10. The undertaking may consider the tables below to facilitate its materiality assessment of material sites identified under paragraph AR 7:		
(...) With regard to AR 7(e), the undertaking may consider using the table below: (...)		
Disclosure Requirement E4-2 – Policies related to biodiversity and ecosystems	Disclosure Requirement E4-2 – Policies related to biodiversity and ecosystems	Disclosure Requirement E4-2 – Policies related to biodiversity and ecosystems
		AR 5 for para. 12(b) (Policies related to biodiversity and ecosystems) If the undertaking's <i>site</i> is in or near a <i>biodiversity-sensitive area</i> , its activities can be related to material negative <i>impacts</i> on the biodiversity-sensitive area. Whether an undertaking's site outside a biodiversity-sensitive area is near such an area shall be determined by defining the site's area of influence. The area of influence can be determined by applying buffer distances specific to the undertaking's type of activity following regulatory requirements, science-based recommendations and industry best practice.
	AR 2 for para. 14 (Policies related to biodiversity and ecosystems) Paragraph [14(a)] refers to tangible or physical products and does not apply to financial products.	
AR 11. The <i>policies</i> described under this Disclosure Requirement may be integrated in broader environmental or sustainability policies covering different subtopics.		
AR 12. The undertaking may also provide information on how the <i>policy</i> refers to the production, sourcing or consumption of raw materials, and in particular how it:		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(a) limits procurement from suppliers that cannot demonstrate that they are not contributing to significant damage to protected areas or key biodiversity areas (e.g., through certification);		
(b) refers to recognised standards or third-party certifications overseen by regulators; and		
(c) addresses raw materials originating from ecosystems that have been managed to maintain or enhance conditions for biodiversity, as demonstrated by regular monitoring and reporting of biodiversity status and gains or losses.		
AR 13. The undertaking may disclose connections and alignment with other global goals and agreements such as the SDGs 2, 6, 14 and 15 or any other well established global convention related to biodiversity and ecosystems.		
AR 14. When disclosing policies related to social consequences of biodiversity and ecosystems related dependencies and impacts under 23 (f), the undertaking may notably refer to the Nagoya Protocol and the Convention for Biological Diversity (CBD).		
AR 15. When disclosing information about whether and how its policies address the social consequences of biodiversity and ecosystems-related impacts under paragraph 23(f), the undertaking may provide information in relation to:		
(a) the fair and equitable sharing of the benefits arising from the utilisation of genetic resources; and		
(b) the free, prior and informed consent for access to genetic resources.		
AR 16. The undertaking may also explain how its policy enables it to:		
(a) avoid negative impacts on biodiversity and ecosystems in its own operations and related upstream and downstream value chain ;		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(b) reduce and minimise its negative impacts on biodiversity and ecosystems in its operations and throughout the upstream and downstream value chain that cannot be avoided;		
(c) restore and rehabilitate degraded ecosystems or restore cleared ecosystems following exposure to impacts that cannot be completely avoided and/or minimised; and		
(d) mitigate its contribution to material biodiversity loss drivers.		
AR 17. When disclosing its policies , if referring to third-party standards of conduct, the undertaking may disclose whether the standard used:		
(a) is objective and achievable based on a scientific approach to identifying issues, and realistic in assessing how these issues can be addressed on the ground under a variety of practical circumstances;		
(b) is developed or maintained through a process of ongoing consultation with stakeholders with balanced input from all relevant stakeholder groups, including producers, traders, processors, financiers, local people and communities, indigenous peoples, and civil society organisations representing consumer, environmental and social interests, with no group holding undue authority or veto power over the content;		
(c) encourages a step-wise approach and continuous improvement, both in the standard and its application of better management practices, and requires the establishment of meaningful targets and specific milestones to indicate progress against principles and criteria over time;		
(d) is verifiable through independent certifying or verifying bodies, which have defined and rigorous assessment procedures that avoid conflicts of interest, and are compliant with ISO guidance on accreditation and		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
verification procedures or Article 5(2) of Regulation (EC) No 765/2008; and		
(e) conforms to the ISEAL Code of Good Practice.		
Disclosure Requirement E4-3 – Actions and resources related to biodiversity and ecosystems	Disclosure Requirement E4-3 – Actions and resources related to biodiversity and ecosystems	Disclosure Requirement E4-3 – Actions and resources related to biodiversity and ecosystems
AR 18. The undertaking may relate significant monetary amounts of CapEx and OpEx required to implement the actions taken or planned to:		
(a) the relevant line items or notes in the financial statements;		
(b) the key performance indicators required under article 8 of Regulation (EU) 2020/852 and under Commission Delegated Regulation (EU) 2021/2178; and		
(c) if applicable, the CapEx plan required by Commission Delegated Regulation (EU) 2021/2178.		
AR 19. The undertaking may disclose whether it considers an “avoidance” action plan, which prevents damaging actions before they take place. Avoidance often involves a decision to deviate from the business-as-usual project development path. An example of avoidance is altering the biodiversity and ecosystem footprint of a project to avoid destruction of natural habitat on the site and/or establishing set-asides where priority biodiversity values are present and will be conserved. At a minimum, avoidance should be considered where there are biodiversity and ecosystem-related values that are in one of the following categories: particularly vulnerable and irreplaceable, of particular concern to stakeholders , or where a cautious approach is warranted due to uncertainty about impact assessment or about the efficacy of management measures. The three main types of avoidance are defined below:		
(a) avoidance through site selection (Locate the entire project away from areas recognised for important biodiversity values);		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(b) avoidance through project design (Configure infrastructure to preserve areas at the project site with important biodiversity values); and		
(c) avoidance through scheduling (Time project activities to account for patterns of species behaviour (e.g., breeding, migration) or ecosystem functions (e.g., river dynamics)).		
AR 20. With regard to key actions , the undertaking may disclose:		
(a) a list of key stakeholders involved (e.g., competitors, suppliers, retailers, other business partners, affected communities and authorities, government agencies) and how they are involved, mentioning key stakeholders negatively or positively impacted by actions and how they are impacted, including impacts or benefits created for affected communities, smallholders, indigenous peoples or other persons in vulnerable situations;		
(b) where applicable, an explanation of the need for appropriate consultations and the need to respect the decisions of affected communities;		
(c) a brief assessment of whether the key actions may induce significant negative sustainability impacts ;		
(d) an explanation of whether the key action is intended to be a one-time initiative or systematic practice;		
(e) an explanation of whether the key action plan is carried out only by the undertaking, using the undertaking's resources, or whether it is part of a wider initiative to which the undertaking significantly contributes. If the key action plan is part of a wider initiative, the undertaking may provide more information on the project, its sponsors and other participants;		
(f) a description of how it contributes to systemwide change, notably to alter the drivers of biodiversity and ecosystem change, e.g., through technological,		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
economic, institutional, and social factors and changes in underlying values and behaviours;		
AR 21. In the context of this Disclosure Requirement, “local and indigenous knowledge” refer to the understandings, skills and philosophies developed by societies with long histories of interaction with their natural surroundings. For rural and <i>indigenous peoples</i> , local knowledge informs decision-making about fundamental aspects of day-to-day life.		
Metrics and Targets		
Disclosure Requirement E4-4 – Targets related to biodiversity and ecosystems	Disclosure Requirement E4-4 – Targets related to biodiversity and ecosystems	Disclosure Requirement E4-4 – Targets related to biodiversity and ecosystems
AR 22. The undertaking may specify whether the target addresses shortcomings related to the Substantial Contribution criteria for Biodiversity as defined in the delegated acts adopted pursuant to Article 15(2) of Regulation (EU) 2020/852. Where the Do No Significant Harm (DNSH) criteria for Biodiversity as defined in delegated acts adopted pursuant to Article 10(3), Article 11(3), Article 12(2), Article 13(2), and Article 14(2) of Regulation (EU) 2020/852 are not met, the undertaking may specify whether the target addresses shortcomings related those DNSH criteria.		
AR 23. When disclosing information required under paragraph 29 for the purpose of setting targets the undertaking shall consider the need for an informed and willing consent of local and <i>indigenous peoples</i> , the need for appropriate consultations and the need to respect the decisions of these communities.	AR 5 for para. 17 (Targets related to biodiversity and ecosystems) When disclosing information required under paragraph 17 for the purpose of setting targets the undertaking shall consider the need for a free, prior and informed consent of local and <i>indigenous peoples</i> , the need for appropriate consultations and the need to respect the decisions of these communities.	AR 6 for para. 13 (Actions related to biodiversity and ecosystems). Actions to be disclosed under paragraph 13 shall consider the right to free, prior and informed consent of <i>indigenous peoples</i> (see also ESRS S3-2).
AR 24. The targets related to material impacts may be presented in a table as illustrated below: (...)		
AR 25. The targets related to the potentially material sustainability matters listed in paragraph		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
AR 4 of this Standard, may be presented in a table as illustrated below: (...)		
AR 26. Measurable targets related to biodiversity and ecosystems may be expressed as:		AR 7 for para. 15 (Targets related to biodiversity and ecosystems). Biodiversity-related targets:
		(a) typically address ‘pressures’ on nature and aim at reducing the drivers of biodiversity and ecosystem change (e.g. avoiding land-use change due to the conversion of forest land) as well as address the ‘state of nature’ and aim to improve the species and ecosystem extent and condition (e.g. increasing the population size of species at extinction risk or restoring a landscape condition compared to a baseline level);
(a) size and location of all habitat areas protected or restored, whether directly or indirectly controlled by the undertaking, and whether the success of the restoration measure was or is approved by independent external professionals;		
		(b) are most effective if they are science-based and aligned with ecological thresholds and contribute to the targets of the GBF;
(b) recreated surfaces (environments in which management initiatives are implemented so as to create a habitat on a site where it did not exist initially); or		
		(c) can be set at different levels (see ESRS 2 <i>General Disclosures</i> , paragraph 51(c)), e.g. at site , landscape, company or upstream value chain level, depending on the goal of the target and the capacity of the undertaking to influence its achievement;

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(c) number or percentage of projects / sites whose ecological integrity was improved (e.g., installation of fish passes, wildlife corridors).		
		(d) are typically implemented in accordance with the mitigation hierarchy: avoidance, minimisation, restoration and compensation.
Disclosure Requirement E4-5 – Impact metrics related to biodiversity and ecosystems change	Disclosure Requirement E4-5 – Metrics related to biodiversity and ecosystems change	Disclosure Requirement E4-5 – Metrics related to biodiversity and ecosystems change
		<p>AR 8 for para. 18 (Metrics related to biodiversity and ecosystems change) To inform the prioritisation for disclosure and the level of aggregation or disaggregation, the undertaking shall consider locations where its own operations are related to material negative impacts on biodiversity-sensitive areas.</p> <p>The undertaking is not necessarily expected to disclose this information for each of its individual sites and can aggregate information to relevant groups of sites related to its material impacts, risks and opportunities, for example based on the same biodiversity-sensitive area or cluster of areas in a region affected by multiple sites, in accordance with ESRS 1 <i>General Requirements</i>, Section 3.3.2.</p>
AR 27. When preparing the information required under this Disclosure Requirement, the undertaking shall consider and may describe:		
(a) the methodologies and metrics used and an explanation for why these methodologies and metrics are selected, as well as their assumptions, limitations and uncertainties, and any changes in methodologies made over time and why they occurred;		
(b) the scope of the metrics and methodologies, for example:		
i. undertaking, site, brand, commodity, corporate business unit, activity;		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
ii. aspects (as set out in paragraph AR 4) covered.		
(c) the biodiversity components of the metrics: species specific, ecosystem specific;		
(d) the geographies covered by the methodology and an explanation of why any relevant geographies were omitted;		
(e) how the metrics integrate ecological thresholds (e.g., the biosphere integrity and land-system change, planetary boundaries) and allocations;		
	AR 7 for para. 20 (Metrics related to biodiversity and ecosystems change) Information to be disclosed under this paragraph applies for those locations:	
	(a) where the undertaking has identified material impacts, risks and opportunities arising from its direct operations or that are significant drivers of material impacts, risks and opportunities; and/or (b) the undertaking has prioritised them (e.g. for management attention, resource allocation, and monitoring), due to their relevance for achieving sustainability-related objectives covered by its policies, actions and targets (if any); and/or (c) the assets and/or activities from own operations in those locations interact negatively with biodiversity sensitive areas.	
	AR 8 for para. 20 (Metrics related to biodiversity and ecosystems change) If the undertaking's site is in a biodiversity sensitive area , it is highly likely that its activities will negatively affect the area. Whether a site, which is outside of a biodiversity sensitive area, is <i>near</i> such an area shall be determined: (a) by the capacity of activities related to the site to negatively affect species and ecosystems in the biodiversity sensitive area; (b) based on a buffer zone specific to the type of activity and the species and ecosystems in the area. Buffer zones	

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
	can be determined following industry best practice and science-based recommendations, such as by the Integrated Biodiversity Assessment Tool (IBAT) or based on findings of a site-level survey.	
	<p>AR 9 for para. 21 (Metrics related to biodiversity and ecosystems change) Depending on which sub-topic is assessed to be material, the undertaking shall include metrics in relation to:</p> <p>(a) drivers of biodiversity and ecosystem change (terrestrial and marine habitat change, invasive species);</p> <p>(b) the state of species (e.g. related to extinction risk);</p> <p>(c) the extent and condition of terrestrial and marine ecosystems (e.g. related to site condition and landscape condition); and</p> <p>(d) ecosystem services.</p>	<p>AR 10 for para. 19 (Metrics related to biodiversity and ecosystems change). Depending on which sub-topic is assessed material, the undertaking shall include metrics in relation to:</p> <p>(a) drivers of biodiversity and ecosystem change;</p> <p>(b) the state of species (e.g. related to extinction risk);</p> <p>(c) the condition and extent of terrestrial, freshwater, and marine ecosystems (e.g. related to site condition and landscape condition); and</p> <p>(d) ecosystem services..</p>
	<p>AR 10 for para. 21 (Metrics related to biodiversity and ecosystems change) Where possible measurement at site using state of nature metrics is best suited to determine impact on biodiversity and ecosystems. Measurement at site is especially relevant where those sites are in or near biodiversity sensitive areas. Where measurement at site is not feasible, estimation using measurement of impact drivers or estimates of state of nature can be used.</p>	
(f) the frequency of monitoring, key metrics being monitored, and the baseline condition/value and baseline year/period, as well as the reference period;	<p>AR 11 for para. 21 (Metrics related to biodiversity and ecosystems change) When identifying metrics to disclose the undertaking shall consider:</p> <p>(a) (27(f) amended) the frequency of monitoring, and the baseline condition/ value and baseline year/period; and</p> <p>(b) whether the metrics enable users to understand how they relate to the material impacts.</p>	<p>AR 12 for para. 19 (Metrics related to biodiversity and ecosystems change). When identifying metrics to disclose, the undertaking shall consider:</p> <p>(a) the frequency of monitoring and the baseline condition or value and baseline year or period; and</p> <p>(b) whether the metrics enable users to understand how they relate to the material impacts.</p>

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(g) whether these metrics rely on primary data, secondary data, modelled data or on expert judgement, or a mixture of these;		
(h) an indication of which action is measured and monitored via the metrics and how they relate to the achievement of targets;		
(i) whether metrics are mandatory (required by legislation) or voluntary. If they are mandatory, the undertaking may indicate the relevant legislation; if voluntary, the undertaking may refer to any voluntary standard or procedure used; and		
(j) whether the metrics are informed by or correspond to expectations or recommendations of relevant and authoritative national, EU-level or intergovernmental guidelines, policies, legislation or agreements, such as the Convention for Biological Diversity (CBD) or IPBES.		
AR 28. The undertaking shall disclose metrics that are verifiable and that are technically and scientifically robust considering the appropriate time scales geographies and may disclose how its selected metrics correspond to those criteria. To ensure that the metric is relevant there should be a clear relationship between the indicator and the purpose of the measurement. Uncertainties should be reduced as far as possible. Data or mechanisms used should be supported by well-established organisations and updated over time. Robust modelled data and expert judgment can be used where data gaps exist. The methodology shall be sufficiently detailed to allow for meaningful comparison of impacts and mitigation activities over time. Information gathering processes and definitions must be systematically applied. This enables a meaningful review of the undertaking's performance over time and helps internal and peer comparison.		(see AR 12(b) for para. 19 (Metrics related to biodiversity and ecosystems change))

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
AR 29. If a metric corresponds to a target, the baseline for both shall be aligned. The biodiversity baseline is an essential component of the larger biodiversity and ecosystems management process. The baseline is necessary to inform impact assessment and management planning, as well as monitoring and adaptive management.		
AR 30. Methodologies available to collect data and measure the undertakings' impacts on biodiversity and ecosystems may be separated into three categories as follows:		AR 11 for para. 19 (Metrics related to biodiversity and ecosystems change). Primary data on the state of nature metrics collected at location-level or through remote sensing is the best means to help determine impacts on biodiversity and ecosystems . Using primary data on the state of nature is especially relevant where the undertaking's sites are in or near biodiversity-sensitive areas . The undertaking can also estimate its impacts by using data on impact drivers or secondary data on the state of nature.
(a) primary data: collected in-situ using on the ground surveys;		
(b) secondary data: including geospatial data layers that are overlaid with geographic location data of business activities. i. At the species level, data layers on the ranges of different species can be used to predict the species that may be present at different locations. This includes operation sites and sourcing locations. Different range layers will have different levels of accuracy depending on certain factors (e.g., whether species ranges have been refined based on availability of habitat). Information on the threat status of the species, and the activities that threaten them, can provide an indication of the likely contribution that business activities may be having on driving population trends and threat status.		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
At the ecosystem level, data layers reflecting change in the extent and condition of ecosystems can be applied, including levels of habitat fragmentation and connectivity.		
(c) modelled biodiversity state data: Model-based approaches are commonly used for measuring ecosystem level indicators (e.g., extent, condition, or function). Models quantify how the magnitude of different pressures affects the state of biodiversity. These are referred to as pressure-state relationships and are based on globally collected data. Modelling results are applied locally to estimate how undertaking-level pressures will cause changes in ecosystem condition. An impact driver generally has three main characteristics: magnitude (e.g., amount of contaminant, noise intensity), spatial extent (e.g., area of land contaminated) and temporal extent (duration of persistence of contaminant).		
AR 31. With regard to life cycle assessment for land-use, the undertaking may refer to the “Land-use related environmental indicators for Life Cycle Assessment” by the Joint Research Center.		
AR 32. With regard to the introduction of invasive alien species, the undertaking may disclose the pathways and number of invasive alien species and the extent of surface covered by invasive alien species.		
AR 33. With regard to metrics on the extent and condition of ecosystems, useful guidance can be found in the work of the United Nations System of Environmental Economic Accounting Ecosystem Accounting (UN SEEA EA).		
AR 34. The undertaking may disclose in units of area (e.g., m ² or ha) on land-use using guidance provided by the Eco- Management and Audit Scheme (EMAS) (82):		
(a) total use of land;		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
(b) total sealed area;		
(c) total nature-oriented area on site; and		
(d) total nature-oriented area off site.		
AR 35. The undertaking may disclose, for example, land cover change, which is the physical representation of the drivers “habitat modification” and “industrial and domestic activities”, i.e., the man-made or natural change of the physical properties of the earth’s surface at a specific location.		
AR 36. Land cover is a typical variable that can be assessed with earth observation data.		
AR 37. When reporting on material impacts related to the ecosystems, the undertaking may, in addition to the extent and condition of ecosystems, also consider the functioning of ecosystems by using:		
(a) metric that measures a process or function that the ecosystem completes, or that reflects the ability of the ecosystem to undertake that specific process or function: e.g. net primary productivity, which is a measure of plant productivity based on the rate at which energy is stored by plants and made available to other species in the ecosystem. It is a core process that occurs for ecosystems to function. It is related to many factors, such as species diversity, but does not measure these factors directly; or		
(b) metric that measures changes to the population of scientifically identified species under threat.		
AR 38. At the ecosystem level, data layers reflecting change in the extent and condition of ecosystems may be applied, including levels of habitat fragmentation and connectivity.		
<i>Disclosure Requirement E4-6 – Anticipated financial effects from material biodiversity and ecosystem-related risks and opportunities</i>		
AR 39. The undertaking may include an assessment of its related products and services at risk over the short-,		

ESRS E4 as enacted in 2023	Exposure Draft ESRS E4	Draft Amended ESRS E4
medium- and long-term, explaining how these are defined, how financial amounts are estimated, and which critical assumptions are made.		
AR 40. The quantification of the anticipated financial effects in monetary terms under paragraph 45(a) may be a single amount or a range.		



EFRAG is co-funded by the European Union through the Single Market Programme in which the EEA-EFTA countries (Norway, Iceland and Liechtenstein), as well as Kosovo participate. This document does not necessarily reflect the views of the European Union, the European Commission or of countries that participate in the Single Market Programme. Neither the European Union, the European Commission nor countries participating in the Single Market Programme can be held responsible for them.