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ESRS E1-5: Potential financial effects from environmental matters-related impacts, risks, and opportunities Issues Paper

Objective

- 1 The objective of this paper is for EFRAG SR TEG to determine the amendments to the ESRS requirements related to potential financial effects from the environmental matters-related impacts, risks, and opportunities.
- 2 The rest of the paper is structured as follows:
 - (a) Background- Overview of ESRS Disclosure requirements and other guidance on potential financial effects from environmental matters-related impacts, risks, and opportunities.
 - (b) Feedback received
 - (c) EFRAG Secretariat analysis and recommendations
 - (d) Questions for EFRAG SR TEG
 - (e) Appendices 1-3 (ESRS, IFRS S2, GRI and TNFD guidance)

Background- ESRS Disclosure requirements and other guidance on potential financial effects from environmental matters-related impacts, risks, and opportunities

Draft ESRS Environmental standards

- 3 ESRS E1 *Climate Change* has disclosure requirements on potential financial effects from material physical risk (DR E1-15), potential financial effects from material transition risk (DR E1-16), and potential financial effects from climate-related opportunities (DR E1-17) (See Appendix 1). ESRS E1 has related application guidance for DR E1-15,16 and 17 in paragraphs AG 70 to AG 92.
- 4 In respect of the other environmental standards:
 - (a) The related ESRS E2 *Pollution* requirements are DR E2-6- Pollution-related incidents and deposit impacts and risks, and financial exposure to the undertaking; and DR E2-7- Potential financial effects from pollution-related impacts, risks, and opportunities (see Appendix 1). Application Guidance on DR E2-6 is provided in paragraphs AG 24 and AG 25.
 - (b) The related ESRS E3 *Water and marine resources* requirements are DR E3-7 potential effects from water and marine resources-related impacts, risks, and opportunities (see Appendix 1). No related application guidance is provided under E3.

- (c) The related ESRS E4 *Biodiversity* requirements are DR E4-10 potential effects from biodiversity-related impacts, risks, and opportunities (see Appendix 1). No related application guidance is provided under E4.
- (d) The related ESRS E5 *Resource use and Circular Economy* requirements are DR E5-9- Financial effects from resource use and circular economy-related impacts, risks, and opportunities (see Appendix 1). No related application guidance is provided under E5.

Other related guidance

- 5 IFRS S2 *Climate-related Disclosures* is based on the TCFD framework. The core topic of the **strategy section, sub-section-financial position, financial performance and cash flow**; requires entities to disclose information that enables users of general purpose financial reporting to understand the effects of significant climate-related risks and opportunities on its financial position, financial performance and cash flows for the reporting period, and the anticipated effects over the short, medium and long term—including how climate-related risks and opportunities are included in the entity’s financial planning. The **strategy section, sub-section on climate resilience** requires the reporting of scenario analysis information. Scenario analysis reflects the potential financial effects of climate-related risks and opportunities.
- 6 The core topic- **metrics and targets**- requirements for the cross-industry metrics include the respective disclosures of the amount and percentage of assets or business activities vulnerable to transition risks and physical risks and aligned to climate-related opportunities. A few examples are provided in the Illustrative Guidance (see Appendix 2 for the IFRS S2-related requirements and Illustrative Guidance).
- 7 In both the ESRS and IFRS S2 requirements, the potential future financial effects from environmental matters risks include those that may not meet the IFRS recognition and measurement requirements for assets and liabilities.
- 8 Similar GRI requirements are as follows:
 - (a) GRI 201-2 Financial implications and other risks and opportunities due to climate change (see Appendix 3)
 - (b) GRI 306-3 Significant spills. This standard is related to the impacts of pollution
- 9 Finally, the Taskforce on Nature-related Financial Disclosures (TNFD) Risk and Opportunity Management and Disclosure framework in its **‘metrics and targets’** section includes the disclosure of the amount and extent of assets or business activities vulnerable to physical, transition and systemic risks (see Appendix 3).

Feedback received

Climate change (ESRS E1)

Additional guidance, implementation difficulties and phase-in

- 10 Preparers and other stakeholders highlighted that it is very challenging to assess and report on the quantitative information on potential financial effects.
- 11 It is difficult to make projections of financial effects on enterprise value as it can be difficult to distinguish among several drivers of changes in value. In other words, to determine what is the effect of only sustainability/ESG-related factors, especially in the long-term as there are several uncertainties associated with these factors. For instance, there is the challenge of disentangling the climate risk-related effects in reported assets and liabilities (e.g., in currently reported fair values).

Potential financial effects from environmental matters-related impacts, risks and opportunities- Issues Paper

- 12 Respondents have indicated the need for additional application guidance for the measurement of potential financial effects not covered under IFRS or other accounting standards' requirements. Some respondents noted terms applied within the proposed requirements that are undefined in accounting standards (e.g., cost savings, net turnover for financial institutions) and they suggested the need for additional guidance on these terms.
- 13 Due to the difficulties in the measurement of the quantitative information, transitional provisions are needed for financial effects disclosures (i.e., qualitative rather than quantitative disclosures of the intended financial effects should be initially required). A phase-in period of three years was suggested.
- 14 More details are requested for 'probability of occurrence' and 'magnitude of financial effects'.
- 15 Several respondents pointed out that disclosures on opportunities may be commercially sensitive from a competition perspective.

Additional information requested

- 16 Investors generally supported the quantitative disclosures albeit some expressed cautious support. The suggested improvements to the quantitative disclosures include:
 - (a) Disclosure of location data, list of assets and business activities at sites vulnerable to physical risks
 - (b) Paragraph AG81(a), should require an explanation of how stranded assets were identified. Undertakings should be required to disclose the scope, time horizon, critical assumptions, parameters and limitations of this assessment, as is already proposed for reporting on the percentage of assets and business activities vulnerable to physical risk.
- 17 Users also suggested that it is necessary to provide the context behind quantitative disclosures. For instance,
 - (a) Whilst reporting on potential financial effects of climate-related opportunities, disclosures putting market size into perspective against current EU Taxonomy-aligned turnover, which is currently optional under ED ESRS E1 [AG92], should be made mandatory. Undertakings should also be required to report planned future EU Taxonomy-aligned turnover and link this with reporting on market size.
 - (b) undertakings should be required to provide commentary on how they will pursue climate-related opportunities.
- 18 In respect of scenario analysis information, which incorporates information on potential financial effects albeit that it is not part of DR E1-15-17 but is covered in the application guidance; a respondent noted the need for normative guidance on recommended scenarios, consistency with NGFS, and to narrow down the list of examples. IPCC is appropriate for physical risk and IEA scenarios for transition risk. The respondent noted that mandatory narratives on reasons for the selection of a scenario, align with paragraph 15 of IFRS S2.
- 19 The GRI response noted there can be climate risks and opportunities for workers and communities which do not have a material financial effect.

Connectivity between financial reporting and sustainability reporting information

- 20 Statement of consistency: Mixed views were expressed on the need for a statement of consistency¹ with financial statements as recommended in AG 77 and 78. One respondent noted that article 34 of the Accounting Directive² affects the preparation of the management report and by extension will affect sustainability reporting. In the respondent's view, article 34 makes a specific requirement in the ESRS redundant. The respondent noted that if the statement of consistency is meant to form a special requirement for sustainability reporting, this must be regulated at the level of the Directive, but not by Level II regulation (i.e., by ESRS).
- 21 On the other hand, several respondents emphasised the importance of consistency between sustainability reporting and financial statements information. And one respondent welcomed the explicit requirement for a statement of consistency but suggested that it be clarified to also encourage explanations of how assumptions that give the appearance of being inconsistent (as it may appear that they should be the same), differ for reasons other than those mentioned in paragraphs AG 77 and AG 78 (e.g., if internal carbon prices applied for asset impairment differ from those applied internally for investment decisions).
- 22 Reconciliation to financial statements: Some respondents acknowledged the importance of connectivity with financial reporting but pointed to the difficulty that could arise in reconciling some items to financial statements including currently undefined terms (e.g., net turnover reconciliation).
- 23 A respondent recommended that an explicit and prominent reference should be made to state that the sustainability reporting does not in any way negate requirements to consider the effects of climate, when material, in applying accounting standards, including disclosure of material information under those standards. However, EFRAG Secretariat notes that this suggestion is outside the scope of ESRS and should instead be addressed within the accounting framework and that the IASB has added a project on reporting on climate risk in financial statements to its 2022-2026 workplan.

Other comments

- 24 Materiality: Some respondents asked for a definition of material physical risk (e.g., are severe weather events not attributable to climate change deemed to be a physical risk?) as well as for material transition risk.

¹ AG 77. The undertaking shall include a statement of consistency illustrating the consistency of data and of assumptions made in sustainability reporting to assess the financial effects from material physical risks with the corresponding data and assumptions used for the financial statements (e.g., impairment of assets, useful life of assets, estimates and provisions).

AG 78. A reference to the relevant paragraphs of the financial statements shall be included in the statement of consistency. If the assumptions are not consistent, the statement of consistency should state that fact and explain the reason (e.g., the full financial implications of climate-related risks are still under assessment or are not deemed material).

² Article 34 states that Member States shall ensure that the financial statements of [public-interest entities](#), medium-sized and large undertakings are audited by one or more statutory auditors or audit firms approved by Member States to carry out statutory audits on the basis of [Directive 2006/43/EC](#). The statutory auditor(s) or audit firm(s) shall also: (a) express an opinion on: (i) whether the management report is consistent with the financial statements for the same financial year, and (ii) whether the management report has been prepared in accordance with the applicable legal requirements; (b) state whether, in the light of the knowledge and understanding of the undertaking and its environment obtained in the course of the audit, he, she or it has identified [material](#) misstatements in the management report, and shall give an indication of the nature of any such misstatements.

- 25 Safe harbours: Some respondents suggested the need for safe harbours that protect reporting undertakings from liability and cover forward-looking information statements.

Other environmental topics (ESRS E2-5)

- 26 Respondents noted the immature reporting of the other environmental topics (i.e., besides climate change). The lack of application guidance in the ESRS E3-5 topics was also noted, and it was suggested to either move the disclosure requirements on the financial effects of these other environmental topics to sector-specific Standards or phase in the adoption of these requirements.
- 27 There is a need for alignment to upcoming legislation across the environmental topics' requirements (e.g., alignment to the EU taxonomy legislation).

ESRS E 2 Pollution

- 28 A respondent suggested that DR E2-6 and 2-7 should be merged.
- 29 Drafting improvements: Respondents pointed to the need for either clarification or definition of some terms applied. Specifically,
- (a) deposits that are in paragraphs 46 and 47 of DR E2-6. It is noted that GRI in its letter highlighted that GRI 306-3 refers to spills³ instead of deposits.
 - (b) market size that is in paragraph 52 of DR E2-7. A respondent suggested the use of turnover associated with products and services as an alternative to market size.
 - (c) A respondent also indicated that there is a need to clarify what is meant by pollution-related impacts including the level of detail and precision expected.
- 30 Paragraph 48 requires the undertaking to disclose its operational and capital expenditures incurred in the reporting period in conjunction with these major incidents and deposits. A respondent indicated that the notion of "major" is unclear and that it can be challenging to separate precisely what sort of investment or costs have solely been done in the context of a major incident.
- 31 Paragraph 46 of E2 encompasses potential financial effects⁴ whereas Paragraph 47 relates to past impacts and realised effects on financial performance⁵. A respondent suggested the need to highlight this distinction between these two paragraphs. Of note, IFRS S2 distinguishes between current and anticipated effects.
- 32 Need for additional guidance: The potential effects in paragraph 46 may encompass amounts that are yet to be recognised in the financial statements. Similarly, paragraph 49 on liabilities⁶ relates to amounts that are not covered under IFRS

³ GRI requires information of the location, volume and material, and the impacts, for each spill that is reported in the organization's financial statements, whereas ESRS require a description of all the cases of occurred incidents, clarifying the material environmental and societal impacts.

⁴ ESRS E2 Paragraph 46 states "The principle to be followed under this Disclosure Requirement is to provide an understanding of how principal pollution-related incidents and deposits may affect the environment and society and/or the undertaking's development, performance, and position over the short-, medium- and long-term. This includes the consideration that those potential future financial effects may not meet the recognition criteria set for financial statements at the reporting date."

⁵ ESRS E2 Paragraph 47 states "The disclosure required by paragraph 45 shall include a description of major incidents and deposits, based on double-materiality assessments, whereby pollution had negative effects on the environment and/or on the undertaking's financial performance in the past reporting year, e.g., through interruptions of production and/or in supply chain as a result of pollution, or through pollution prevention and control measures."

⁶ ESRS E2 Paragraph 49 states "If not already disclosed as part of the undertaking's financial statements, the undertaking shall disclose its provisions for environmental protection and remediation costs, e.g., for rehabilitating contaminated sites,

accounting requirements. In this regard, respondents to E1 indicated there is a need for guidance on the measurement of amounts that are not within the scope of IFRS requirements, and this suggestion would also be applicable for these ESRS E2-paragraphs 46 and 49 requirements.

- 33 Materiality assessment / rebuttable presumption. A respondent noted there is a need to clarify if the disclosure of major incidents is only a requirement in case this specific topic is identified as material in the double materiality process, or is it a requirement if the broader topic of pollution is identified.
- 34 Time horizon: There is a need to align the time horizon for proposed disclosed information with the one for the financial planning

EFRAG Secretariat analysis and recommendations

Climate change (ESRS E1)

Phase-in proposals and DR structure

- 35 Climate reporting, which is also required by both the TCFD recommendations and IFRS S2, is more mature than the reporting of other environmental topics. To help preparers and other stakeholders and to increase comparability, the draft ESRS E1 provides more detailed substance and elaborates on concepts like:
- Potential financial effects from physical risks: assets vulnerable to material physical risks and net turnover from business activities at physical risk
 - Potential financial effects from transition risks: potentially stranded assets, potential future liabilities originating from emissions trading schemes (EU ETS) or from gross Scope 1, 2 and total GHG emissions translated into monetary amounts, volumes of carbon credits planned to be cancelled, turnover from business activities potentially affected,
 - Potential financial effects from climate-related opportunities: expected cost savings and potential market size for low carbon products and services or adaptation solutions,

For these amounts, either a reconciliation to the most relevant amount presented in the financial statements or a reference to the related line item in the financial statement is required to ensure connectivity between the financial reporting and sustainability reporting information.

- 36 As has been highlighted by respondents and through various thematic reviews⁷, the integration of climate risks and opportunities in financial statements is still in its infancy and needs to be enhanced. In this regard, understanding and assessing potential future climate hazards or events (physical or transition) is key. Low probability events (for instance, weather events or enactment of carbon taxes) have to be identified and monitored in order to be able to decide when these will become more likely than not. And both pre-financial information and the financial statements information have to be developed in parallel.
- 37 However, it is acknowledged that the maturity of current market practices in assessing and quantifying climate-related risks and opportunities is low, and there is also a need to further develop integrated thinking between financial and

recultivating landfills, removal of environmental contamination at existing production or storage sites and similar measures. When the information is provided in the undertaking's financial statements, a clear reference shall be included in the sustainability statements."

⁷ See 2021 study by Carbon Tracker- <https://carbontracker.org/reports/flying-blind-the-glaring-absence-of-climate-risks-in-financial-reporting/>

sustainability teams within many reporting undertakings. As a result, ESRS E1 requirements should take account of many reporting undertakings' current capacity to provide quantitative disclosures and the level of preparers' awareness and knowledge of physical and transition risks and related tools and methodologies.

- 38 For the above reasons, the EFRAG Secretariat recommends allowing undertakings to only disclose qualitative information during the first 3 years and suggests moving the related paragraph to the main body. IFRS S2 has the same application requirements but with no time limits. Another approach that could be considered is that applied by the related GRI Standard (GRI 201-2) that distinguishes requirements, recommendations, and guidance (see Appendix 3). The quantitative disclosures could be included under recommendations and elevated to requirements at a later date when more mature climate-reporting practices are established.
- 39 Furthermore, the EFRAG Secretariat recommends that ESRS E1 requirements could at a later stage include more guidance on how to assess potential effects. Definition provided in other legislation (e.g., EU Taxonomy legislation definition of net turnover) could be incorporated. On the point raised by some respondents on the difficulties in differentiating, the EFRAG Secretariat notes that the accounting standard setters are addressing the accounting for ESG-linked financial instruments.

Connectivity with financial statement information and statement of consistency

- 40 Several respondents underscored the importance of consistency of information in sustainability reporting and the financial statements, and for transparency and explanations in cases where there are different assumptions. In light of respondent comments, the EFRAG Secretariat suggests adding examples in paragraphs AG 78 that are not yet captured and to make it clear these examples are meant to be illustrative and not exhaustive.
- 41 The EFRAG Secretariat also takes note of the mixed views expressed on the need for a statement of consistency as proposed in AG 77 and 78. One view supported this statement of consistency. But another view expressed considered this requirement redundant in light of article 34 of the Accounting Directive.
- 42 The EFRAG Secretariat notes that article 34 of the Accounting Directive primarily relates to auditor opinion on the consistency of the management report and financial statements. We do not consider an expressed audit opinion in the auditor report on the consistency between information across different reporting sections to be equivalent to the statement of consistency. An audit opinion does not have the same information content as the proposed statement of consistency- for instance, the former will not explicitly convey the line items that are either consistent or inconsistent. Hence, due to the importance of strengthening the connectivity between sustainability reporting and financial statements, the EFRAG Secretariat suggests retaining the statement of consistency.
- 43 Furthermore, while supporting retaining the reconciliation of amounts to the financial statements where applicable to ensure connectivity, the EFRAG Secretariat notes there is a need to ensure this reconciliation requirement only applies for significant amounts and with a clarification of what is meant by significant amounts.
- 44 Regarding current/past vs anticipated effects, the EFRAG Secretariat notes that current CapEx and OpEx are required under Actions and Resources disclosure requirements and that anticipated effects are required under Potential financial effects, in alignment with IFRS S2.

Other environmental topics

Pollution

- 45 Under the ESRS E2 requirements, the risks are not assessed based on future scenarios but on events that have already occurred generating pollution or risks of pollution. The goal is not to assess the inherent risks of pollution as this one is monitored and mitigated by pollution prevention policies (contrary to climate). The financial effects of pollution incidents are more short-term than for climate. Based on the same reasoning, once a pollution event has occurred, the entity needs to report on the more likely than not costs (accruals) as well as on the less likely than not risks and related costs (remediation costs) through a range of amounts.
- 46 The EFRAG Secretariat recommends only retaining DR E2-6 on pollution incidents beyond what has already been accounted for in the financial statements. And to incorporate the various drafting improvement suggestions outlined in paragraphs 27 to 29 above (e.g., replace deposits with spills to align with GRI, make clearer the differences between current/past effects versus anticipated effects and add qualitative and contextual information consistent with what has already been disclosed in the notes to financial statements).

Water and marine resources; biodiversity; and resource use and circular economy

- 47 EFRAG Secretariat concurs with the feedback that the potential financial effects of water-, biodiversity- and resource use and circular economy-related impacts, risks, and opportunities- are predominantly sector driven and not mature enough to be disclosed at the sector-agnostic level. Hence, it is recommended that these particular potential financial effects disclosure requirements should be moved to sector-specific Standards. In other words, DR E2-7, DR E3-7, DR E4-10 and DR E5-9 should be deleted from the sector-agnostic Standards and addressed in sector-specific standards. However, were the EFRAG SRB to decide that the general approach to materiality will envisage a list of mandatory items next to a list of items subject to materiality assessment, then a qualitative version of requirements for potential financial effects could be included in the scope of materiality assessment at a sector-agnostic level. That being said, at the time of preparation of this paper, the SRB is yet to make decisions on the general approach to materiality.

Other general comments

Safe harbours and/or the possibility to omit information that may be prejudicial to the undertaking

- 48 Some respondents suggested the need for safe harbours due to legal liability risks that can arise from the reporting of potential effects of climate-related risks and opportunities. The EFRAG Secretariat notes the idea of safe harbours which works well in some jurisdictions may not be applicable in an EU context.
- 49 Relatedly, there were comments on the confidential nature of some of the required environmental topics disclosures. In this regard, as noted in the EFRAG Secretariat issues paper⁸ related to ESRS G2: *Definition of Corruption/Bribery and anti-competitive behaviour events and omission of sensitive or risky information*, a recurring general comment in the ESRS consultation is the request to introduce an option to omit information when it is commercially or legally prejudicial.

⁸ Issues paper 06-01 related to ESRS G2 discussed by EFRAG SR TEG on 6 September 2022 <https://efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FMeeting%20Documents%2F208261335242821%2F05-01%20Issues%20paper%20Corruption%20events%20or%20incidents%20re%20upload%20SR%20TEG%20220906.pdf>

- 50 However, the EFRAG Secretariat also notes that this aspect is specifically covered by the CSRD. In ESRS 2-1 paragraph 5(c), it is stated that if a Member State allows for an exemption as per CSRD due to the information being prejudicial, the use of the option should be disclosed. Hence, the EFRAG Secretariat considers that it would be contrary to the CSRD to broaden the scope of such exemption in level 2 regulation (ESRS) when level 1 regulation (CSRD) already covers this aspect.

Materiality and time horizons

- 51 The respondent comments and questions on implications of materiality, rebuttable presumption and time horizons requirements related to the environmental topics are addressed in the cross-cutting requirements (ESRS 1 and 2) and related amendments. There may be a need for application guidance on identifying material physical risk and material transition risk as requested by some respondents. However, providing additional application guidance within topical standards including ESRS E1 goes beyond the scope of what is feasible within the timeframe for issuance of these standards. Thus, any guidance on identifying material items will only be considered under the cross-cutting standard with general requirements (i.e., ESRS 1 and 2).

Questions for EFRAG SR TEG

- 52 On ESRS E1, do you agree with the proposed phase-in, allowing for qualitative disclosures for potential financial effects during the first 3 years of adoption if quantification is impracticable? Do you think that ESRS E1 should include more guidance on amounts that are not recognised in financial statements having in mind that IFRS S2 does not provide any such guidance?
- 53 Do you agree with the EFRAG Secretariat recommendation (see paragraphs 39 to 41) to a) retain the statement of consistency as required in AG 77 and AG 78, and b) limit the reconciliation to financial statements to only significant amounts?
- 54 In respect of other environmental standards besides climate change, do you agree with EFRAG Secretariat to move E2, 3, 4, and 5 DRs on potential financial effects from related impacts, risks, and opportunities to sector-specific Standards and to only retain DR E2-6 on pollution incidents and take on board the improved drafting suggestions provided in the feedback?
- 55 As noted in paragraph 47, do you agree that in addition to addressing potential financial effects within other environmental matters within the sector-specific standards, qualitative disclosures of potential financial effects could be made mandatory across E2, 3, 4 and 5 DRs?
- 56 Do you have any other comments on the feedback received and EFRAG Secretariat analysis and recommendations?

Appendix 1: ESRS Disclosure Requirements

Introduction

- 1 Appendix 1 presents the ESRS disclosure requirements related to potential financial effects from environmental matters-related impacts, risks and opportunities. These are included below.

ESRS E1- CLIMATE CHANGE

Disclosure Requirement E1-15 – Potential financial effects from material physical risks

65. The undertaking shall disclose the estimated potential financial effects from its material physical risks.

66. The principle to be followed under this Disclosure Requirement is to provide an understanding of how material climate-related physical risks may affect the undertaking's performance and position over the short, medium and long term, considering that those potential future financial effects may not meet at the reporting date the recognition and measurement criteria set for assets and liabilities.

67. The disclosure required by paragraph 65 shall include:

- (a) the assets (monetary amounts and percentage) at material physical risk over the short-, medium-, and long-term and the share of these assets addressed by the climate change adaptation action plan; and
- (b) the share (%) of net turnover from its business activities at material physical risk over the short-, medium- and long-term.

68. The undertaking shall disclose a reconciliation of these assets and share of net turnover to the most relevant amounts presented in the financial statements.

Disclosure Requirement E1-16 – Potential financial effects from material transition risks

69. The undertaking shall disclose the estimated potential financial effects from material transition risks.

70. The principle to be followed under this Disclosure Requirement is to provide an understanding of how material climate-related transition risks may affect the undertaking's performance and position over the short-, medium- and long-term, considering that those potential future financial effects may not meet at the reporting date the recognition and measurement criteria set for assets and liabilities.

71. The disclosure required by paragraph 69 shall include:

- (a) the assets (monetary amounts and percentage) at material transition risk over the short-, medium- and long-term and the share of these assets addressed by the climate change mitigation action plan;
- (b) the liabilities (monetary amounts) that may have to be recognised in financial statements over the short-, medium- and long-term; and
- (c) the share (%) of turnover from its business activities at material transition risk.

72. The undertaking shall disclose a reconciliation of these assets and turnover to the most relevant amount presented in the financial statements.

Disclosure Requirement E1-17 – Potential financial effects from climate-related opportunities

73. The undertaking shall disclose its potential financial effects from material climate-related opportunities.

74. The principle to be followed under this Disclosure Requirement is to allow users to understand how the undertaking may financially benefit from material climate-related opportunities. The disclosure is complementary to information requested under the Taxonomy Regulation.

75. The disclosure required by paragraph 73, shall include: (a) an assessment of its expected cost savings with regards to climate change mitigation and adaptation actions; and (b) an assessment of the potential market size for low carbon products and services or adaptation solutions, to which the undertaking has or may have access.

ESRS E2- POLLUTION

Disclosure Requirement E2-6 – Pollution-related incidents and deposit impacts and risks, and financial exposure to the undertaking

45. The undertaking shall disclose the impact of and its financial exposure to pollution-related incidents and deposits.

46. The principle to be followed under this Disclosure Requirement is to provide an understanding of how principal pollution-related incidents and deposits may affect the environment and society and/or the undertaking's development, performance and position over the short-, medium- and long-term. This includes the consideration that those potential future financial effects may not meet the recognition criteria set for financial statements at the reporting date.

47. The disclosure required by paragraph 45 shall include a description of major incidents and deposits, based on double-materiality assessments, whereby pollution had negative effects on the environment and/or on the undertaking's financial performance in the past reporting year, e.g., through interruptions of production and/or in supply chain as a result of pollution, or through pollution prevention and control measures.

48. The undertaking shall disclose its operational and capital expenditures occurred in the reporting period in conjunction with these major incidents and deposits.

49. If not already disclosed as part of the undertaking's financial statements, the undertaking shall disclose its provisions for environmental protection and remediation costs, e.g., for rehabilitating contaminated sites, recultivating landfills, removal of environmental contamination at existing production or storage sites and similar measures. When the information is provided in the undertaking's financial statements, a clear reference shall be included in the sustainability statements.

Disclosure Requirement E2-7 – Potential financial effects from pollution-related impacts, risks and opportunities

50. The undertaking shall disclose the potential financial effects of the risks and opportunities arising from pollution-related impacts and dependencies.

51. The principle to be followed under this Disclosure Requirement is to an understanding of the potential effects of risks and opportunities, arising from the undertaking's pollution-related impacts and dependencies, on the undertaking's development, performance and position over the short, medium and long term and therefore on its ability to create enterprise value. This includes those related to pollution prevention and control, considering that those potential future financial effects may not meet at the reporting date the recognition criteria set for financial statements. Such information is complementary to the information requested under the Taxonomy Regulation, particularly related to enabling activities that enable other undertakings to prevent, control and eliminate pollution.

52. The undertaking may include an assessment of the market size of related products and services at risk over the short-, medium-, and long-term, explaining how these are defined, how financial amounts are estimated and which critical assumptions are made.

ESRS E3- WATER AND MARINE RESOURCES

Disclosure Requirement E3-7 – Potential financial effects from water and marine resources-related impacts, risks and opportunities

39. The undertaking shall disclose its potential financial effects of material risks and opportunities arising from water and marine resources-related impacts and dependencies.

40. The principle to be followed under this Disclosure Requirement is to provide an understanding of the potential effects of material risks and opportunities, related to the undertaking's water and marine resources-related impacts and dependencies, on the undertaking's development, performance and position over the short, medium and long term and therefore on its ability to create enterprise value, considering that those potential future financial effects may not meet at the reporting date the recognition criteria set for financial statements. Such information is complementary to the information requested under the Taxonomy Regulation.

41. The undertaking may include an assessment of the market size of related products and services at risk over the short-, medium-, and long-term, explaining how these are defined, how financial amounts are estimated and which critical assumptions are made.

ESRS E4- BIODIVERSITY

Disclosure Requirement E4-10 – Potential financial effects from biodiversity-related impacts, risks and opportunities

67. The undertaking shall disclose its potential financial effects of risks and opportunities arising from biodiversity-related impacts and dependencies.

68. The principle to be followed under this Disclosure Requirement is to provide an understanding of the potential effects of risks and opportunities, arising from the undertaking's biodiversity-related impacts and dependencies, on the undertaking's development, performance and position over the short, medium and long term and therefore on its ability to create enterprise value, considering that those potential future financial effects may not meet at the reporting date the recognition criteria set for financial statements. Such information is complementary to the information requested under the Taxonomy Regulation.

69. The undertaking may include an assessment of the market size of related products and services at risk over the short-, medium-, and long-term, explaining how these are defined, how financial amounts are estimated and which critical assumptions are made.

ESRS- E5- RESOURCE USE AND CIRCULAR ECONOMY

Disclosure Requirement E5-9 – Financial effects from resource use and circular economy-related impacts, risks and opportunities

- 2 The undertaking shall disclose its financial effects of material risks and opportunities arising from resource use and circular economy-related impacts and dependencies.
- 3 The principle to be followed under this Disclosure Requirement is to provide an understanding of the effects of material risks and opportunities, related to the undertaking's resource use and circular economy-related impacts and dependencies, on the undertaking's development, performance and position over the short-, medium- and long-term and therefore on its ability to create enterprise value, considering that those potential future financial effects may not meet at the reporting date the recognition criteria set for financial statements. Such information is complementary to the information requested under the Taxonomy Regulation.
- 4 The undertaking may include an assessment of the market size of related products and services at risk over the short-, medium-, and long-term, explaining how these are defined, how financial amounts are estimated and which critical assumptions are made.

Appendix 2: IFRS S2 Requirements and Illustrative Guidance

Introduction

- 5 Appendix 2 presents the IFRS S2 requirements related to current and anticipated effects, metrics and targets related to physical, transition risk and climate-related opportunities. Also presented is the illustrative guidance.
- 6 IFRS S2 requirements on current and anticipated effects- Paragraph 11 states that “An entity shall disclose information that enables users of general purpose financial reporting to understand the effects of significant climate-related risks and opportunities on its financial position, financial performance and cash flows for the reporting period, and the anticipated effects over the short, medium and long term including how climate-related risks and opportunities are included in the entity’s financial planning. An entity shall disclose quantitative information unless it is unable to do so. If an entity is unable to provide quantitative information, it shall provide qualitative information. When providing quantitative information, an entity can disclose
 - (a) how significant climate-related risks and opportunities have affected its most recently reported financial position, financial performance and cash flows;
 - (b) information about the climate-related risks and opportunities identified in paragraph 14(a) for which there is a significant risk that there will be a material adjustment to the carrying amounts of assets and liabilities reported in the financial statements within the next financial year;
 - (c) how it expects its financial position to change over time, given its strategy to address significant climate-related risks and opportunities, reflecting:
 - (i) its current and committed investment plans and their anticipated effects on its financial position (for example, capital expenditure, major acquisitions and divestments, joint ventures, business transformation, innovation, new business areas and asset retirements);
 - (ii) its planned sources of funding to implement its strategy;
 - (d) how it expects its financial performance to change over time, given its strategy to address significant climate-related risks and opportunities (for example, increased revenue from or costs of products and services aligned with a lower-carbon economy, consistent with the *latest international agreement on climate change*; physical damage to assets from climate events; and the costs of climate adaptation or mitigation); and
 - (e) if the entity is unable to disclose quantitative information for paragraph 14(a)–(d), an explanation of why that is the case.”
- 7 IFRS S2 requirements on metrics and targets Paragraph 21 includes:
 - sub- paragraph 21 b) transition risks—the amount and percentage of assets or business activities vulnerable to transition risks;
 - sub-paragraph 21 c) physical risks—the amount and percentage of assets or business activities vulnerable to physical risks;
 - sub-paragraph 21 d) climate-related opportunities—the amount and percentage of assets or business activities aligned with climate-related opportunities.

IFRS S2 Illustrative guidance

Illustrative guidance

This guidance accompanies, but is not part of, [draft] IFRS S2. It illustrates aspects of [draft] IFRS S2 but is not intended to provide an interpretation.

IG1 Paragraph 21 of [draft] IFRS S2 states that 'an entity shall disclose information relevant to these cross-industry metric categories'. These examples provide an illustration of such information.

Metric category	Unit of measure	Example metrics
Transition risks	amount and percentage	<ul style="list-style-type: none"> • volume of real estate collaterals highly exposed to transition risk • concentration of credit exposure to carbon-related assets • per cent of revenue from coal mining • per cent of revenue passenger kilometres not covered by Carbon Offsetting and Reduction Scheme for International Aviation
Physical risks	amount and percentage	<ul style="list-style-type: none"> • number and value of mortgage loans in 100-year flood zones • wastewater treatment capacity located in 100-year flood zones • revenue associated with water withdrawn and consumed in regions of high or extremely high baseline water stress • proportion of property, infrastructure or other alternative asset portfolios in an area subject to flooding, heat stress or water stress • proportion of real assets exposed to climate-related hazards

continued..

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...continued

Metric category	Unit of measure	Example metrics
Climate-related opportunities	amount and percentage	<ul style="list-style-type: none"> • net premiums written related to energy efficiency and low-carbon technology • number of (1) zero-emissions vehicles, (2) hybrid vehicles and (3) plug-in hybrid vehicles sold • revenues from products or services that support the transition to a lower-carbon economy • proportion of homes delivered certified to a third-party, multi-attribute, green-building standard
Capital deployment	presentation currency	<ul style="list-style-type: none"> • percentage of annual revenue invested in R&D of low-carbon products/services • investment in climate adaptation measures (for example, soil health, irrigation, technology)

Appendix 3: GRI and TNFD

Introduction

8 Below is an excerpt of GRI 201-2 on climate change and GRI 306-3 on pollution.

Disclosure 201-2

Financial implications and other risks and opportunities due to climate change

Reporting requirements

The reporting organization shall report the following information:

- a. Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including:
 - i. a description of the risk or opportunity and its classification as either physical, regulatory, or other;
 - ii. a description of the impact associated with the risk or opportunity;
 - iii. the financial implications of the risk or opportunity before action is taken;
 - iv. the methods used to manage the risk or opportunity;
 - v. the costs of actions taken to manage the risk or opportunity.

Disclosure
201-2

- 2.2 When compiling the information specified in Disclosure 201-2, if the reporting organization does not have a system in place to calculate the financial implications or costs, or to make revenue projections, it shall report its plans and timeline to develop the necessary systems.

Reporting recommendations

- 2.3 When compiling the information specified in Disclosure 201-2, the reporting organization should report the following additional characteristics for the identified risks and opportunities:
 - 2.3.1 A description of the risk or opportunity driver, such as a particular piece of legislation, or a physical driver, such as water scarcity;
 - 2.3.2 The projected time frame in which the risk or opportunity is expected to have substantive financial implications;
 - 2.3.3 Direct and indirect impacts (whether the impact directly affects the organization, or indirectly affects the organization via its value chain);
 - 2.3.4 The potential impacts generally, including increased or decreased:

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2.3.5 Likelihood (the probability of the impact on the organization);

2.3.6 Magnitude of impact (if occurring, the extent to which the impact affects the organization financially).

Guidance

Guidance for Disclosure 201-2

Risk and opportunities due to climate change can be classified as:

- physical
- regulatory
- other

Physical risks and opportunities can include:

- the impact of more frequent and intense storms;
- changes in sea level, ambient temperature, and water availability;
- impacts on workers – such as health effects, including heat-related illness or disease, and the need to relocate operations.

GRI 201: Economic Performance 2016

9

Disclosure 201-2

Continued

Other risks and opportunities can include the availability of new technologies, products, or services to address challenges related to climate change, as well as changes in customer behavior.

Methods used to manage the risk or opportunity can include:

- carbon capture and storage;
- fuel switching;
- use of renewable and lower carbon footprint energy;
- improving energy efficiency;
- flaring, venting, and fugitive emission reduction;
- renewable energy certificates;
- use of carbon offsets.

Background

Climate change presents risks and opportunities to organizations, their investors, and their stakeholders.

As governments move to regulate activities that contribute to climate change, organizations that are directly or indirectly responsible for emissions face regulatory risks and opportunities. Risks can include increased costs or other factors impacting competitiveness. However, limits on greenhouse gas (GHG) emissions can also create opportunities for organizations as new technologies and markets are created. This is especially the case for organizations that can use or produce energy and energy-efficient products more effectively.

See references 2, 3 and 4 in the [References section](#).

Disclosure 306-3

Significant spills

Reporting requirements

The reporting organization shall report the following information:

- a. Total number and total volume of recorded significant spills.
- b. The following additional information for each spill that was reported in the organization's financial statements:
 - i. Location of spill;
 - ii. Volume of spill;
 - iii. Material of spill, categorized by: oil spills (soil or water surfaces), fuel spills (soil or water surfaces), spills of wastes (soil or water surfaces), spills of chemicals (mostly soil or water surfaces), and other (to be specified by the organization).
- c. Impacts of significant spills.

Disclosure
306-3

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9 Below is an excerpt from the TNFD Nature-Related Risk and Opportunity Management and Disclosure Framework.

Table 6: TNFD cross-industry metrics categories

Category	Sub-category	Description	TNFD release	TNFD approach for v0.2 release
Assessment Metrics				
Dependencies and Impacts on nature	Impact drivers	Amount of natural resources that are used as an input to production or non-product outputs of a business activity ³	v0.2	Guidance + illustrative metrics
	State of nature	The condition ⁴ and extent of ecosystem assets, including positive or negative changes	v0.2	Guidance + illustrative metrics
	Ecosystem services/ dependencies	The provision of ecosystem services, including those the business depends on	v0.2	Guidance + illustrative metrics
Nature-related risks	Physical risks	Amount and extent of assets or business activities vulnerable to risk types	v0.3	
	Transition risks		v0.3	
	Systemic risks		Inclusion tbc	
Nature-related opportunities	N/A	Proportion of revenue, assets or other business activities aligned with nature-related opportunities	v0.3	
Response metrics		Could include management, governance, strategy and performance metrics, including progress against targets	v0.4	
Disclosure Metrics				
	Core metrics	Core metrics to be included in all disclosures following the TNFD disclosure recommendations	v0.4	
	Additional metrics	Additional metrics that a company or financial institution may choose to include in their disclosures	v0.4	

Metrics for each category should correspond to related indicators, selected using the criteria outlined in section 3.4, in order to create a suite of related indicators across all metrics categories.