EXPOSURE DRAFT

ESRS E1
Climate change

Basis for conclusions

May 2022

PTF-ESRS
Project Task Force on European sustainability reporting standards

EFRAG

DISCLAIMER

This Basis for Conclusions accompanies but is not part of the Exposure Draft ESRS E1 Climate change. It summarises the considerations of the EFRAG PTF-ESRS and the references to other standard setting initiatives or regulations used in developing the proposed contents of the Exposure Draft.

This Basis for Conclusions has been prepared solely under the responsibility of the EFRAG PTF-ESRS. It, therefore, does not reflect the EFRAG SRB's position at this stage, nor the position of the European Union or European Commission DG Financial Stability, Financial Services and Capital Markets Union (DG FISMA), nor the position of organisations with which the EFRAG PTF-ESRS has cooperated.

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Objective

BC1. The objective of this [Draft] Standard is to set disclosure requirements that cover the information required by undertakings across all sectors (subject to the rebuttable presumption in paragraph 57 of ESRS 1 General principles) in order to report under a double materiality perspective. It covers in particular:

(a) the impacts (how the entity impacts climate change);

(b) the actions and their results;

(c) the material risks and opportunities arising from the undertaking's impacts and dependencies. Such risks and opportunities are sources of financial effects; and

(d) the effects of risks and opportunities on the undertaking's development, performance and position over the short-, medium- and long-term and therefore on its ability to create enterprise value (financial effects).

Context and reference table

BC2. The following steps have been followed in developing the contents of the [Draft] ESRS E1:

(a) consider the requirements of the [Draft] CSRD;

(b) consider reporting practice under the existing NFRD from relevant studies, such as the European Reporting Lab of EFRAG report "How to improve climate-related reporting" issued in February 2020;

(c) consider the directions of the NFRD's 2017 and 2019 non-binding guidelines;

(d) in accordance with the [Draft] CSRD, consider the work of global standard-setting initiatives for sustainability reporting, and existing standards and frameworks. These include, among others, the Global Reporting Initiative (GRI) Standards, the Sustainability Accounting Standards Board (SASB) standards, the International Integrated Reporting Council (IIRC) framework, the Task-Force on Climate-related Financial Disclosures (TCFD) recommendations, the Carbon Disclosure Standards Board (CDSB) framework, CDP questionnaire, the Greenhouse Gas (GHG) protocol and ISO 14064-1. Guidance from and coherence with these existing standards and frameworks has been sought;

(e) analysed the concordance and compatibility with the [Draft] IFRS S2 Climate-related Disclosures published in March 2022 by the International Sustainability Standards Board (ISSB) of the International Financial Reporting Standards (IFRS)-Foundation; and

(f) considered relevant EU legislation, including, among others, Regulation (EU) 2019/2088, Regulation (EU) 2020/852, Regulation (EU) 2021/1119, Directive 2003/87/EC, Regulation (EC) No 1221/2009, Directive (EU) 2018/2001, Directive 2012/27/EU and Commission Recommendation 2013/179/EU.

BC3. The objective of [Draft] ESRS E1 is derived from the [Draft] CSRD, which states that the sustainability reporting standards shall specify information to disclose about climate change mitigation and climate change adaptation.

BC4. The [Draft] ESRS E1 in addition covers disclosure requirements for energy consumption, which is an important determinant of an undertaking's GHG emissions and a driver for climate-related transition risk.

BC5. The following table presents relevant sources that have been considered for the development of the Disclosure Requirements in [Draft] ESRS E1 while in some cases providing further information on requirements in ESRS 2 General, Strategy, Governance and materiality assessment:

Disclosure Requirements	European framework references	International framework references
Climate-related specific application guidance on ESRS 2 Disclosure Requirement **SBM 1 (paragraph 47 (d)) on the resilience of the strategy and business model**	[Draft] CSRD Art. 19a 2 §2 (a) (i) Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.1	TCFD, Final report recommendations (2017), Strategy – Recommended disclosure (c) IFRS S2 §8 (e) and §15
Climate-related specific application guidance on Disclosure Requirement ESRS 2- GOV 4 (paragraphs 64 (a) and (b)) for climate-related remuneration	[Draft] CSRD Art. 19a §2 (e) Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.2	TCFD, Final Report Recommendations (2017), Metrics and Targets – Recommended disclosure (a) CDP, Questionnaire (2021), C1.3 IFRS S2 §5 (f) and §21 (g)
Climate-related specific application guidance on ESRS 2 Disclosure Requirement **GOV 4 (paragraph 64 (c)) for internal carbon pricing scheme**	Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.4	TCFD, Final Report Recommendations (2017), Metrics and Targets – Recommended disclosure (a) CDP, Questionnaire (2021), C11.3 IFRS S2 §21 (f)
Climate-related specific application guidance on ESRS 2 Disclosure Requirements **IRO 1 and IRO 2 on materiality assessment**	[Draft] CSRD Art. 19a §2 (e) (ii) and (f) Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.4	TCFD, Final report recommendations (2017), Strategy – Recommended disclosure (a) and Risk Management – Recommended disclosure (a) IFRS S2 §8 (a), §9, §12, §16 and §17 CDP, Questionnaire (2021), C2.1, C2.3 and C2.4
Disclosure Requirement E1-1 – Transition plan for climate change mitigation	[Draft] CSRD Art. 19a §2 (a) (iii)	TCFD, Guidance on metrics, targets, and transition plans (2021), Strategy - Recommendation (b) IFRS S2 §8 (a) and §13
Disclosure Requirement E1-2 – Policies implemented to manage climate change mitigation and adaptation	[Draft] CSRD Art. 19a §2 (d) Regulation (EC) No 1221/2009 (EMAS) Annex IV B (b) and (g) Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related	TCFD, Final Report Recommendations (2017), Risk management – Recommended disclosure (b) IFRS S2 §7, 8 (c), §13 (a) and §17 (d)

Disclosure Requirements	European framework references	International framework references
	information (2019), Recommended disclosures and further guidance 3.2	
Disclosure Requirement E1-3 – Measurable targets for climate change mitigation and adaptation	[Draft] CSRD Art. 19a §2 (b) SFDR PAI, Indicator 4 of Table 2 of Annex 1 Regulation (EC) No 1221/2009 (EMAS) Annex IV B (d) Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.2	TCFD, Final Report Recommendations (2017), Metrics and targets – Recommended disclosure (c) CDP, Questionnaire (2021), C4.1a, b and c Science Based Target Initiative (Corporate manual and Net-zero standard) IFRS S2 §13, 17 (d), §20 (d) and §23
Disclosure Requirements E1-4 – Climate change mitigation and adaptation action plans and resources	[Draft] CSRD Art. 19a §2 (e) (iii) Regulation (EC) No 1221/2009 (EMAS) Annex IV B (e) Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.3	TCFD, Final Report Recommendations (2017), Strategy – Recommended disclosure (b) TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-industry, climate-related metric categories CDP, Questionnaire (2021), C3.1 and C3.4 IFRS S2 §13 (a), §17 (d), §21 (e) and §22 (b)
Disclosure Requirement E1-5 – Energy consumption and mix	SFDR PAI, Indicator 5 of Table 1 of Annex 1 Regulation (EC) No 1221/2009 (EMAS) Annex IV C 2 (c) (i) Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.5	GRI 302-1 CDP, Questionnaire (2021), C8.2 IFRS S2 §11 and Appendix B
Disclosure Requirement E1-6 – Energy intensity per net turnover	SFDR, PAI, Indicator 6 of Table 1 of Annex 1 Regulation (EC) No 1221/2009 (EMAS) Annex IV C 2 (c) (i)	GRI 302-3
Disclosure Requirements E1-7 – Scope 1 GHG emissions	SFDR, PAI, Indicators 1 and 2 of Table 1 of Annex 1 Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.5	TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-industry, climate-related metric categories GRI 305-1 CDP, Questionnaire (2021), C6.1, C5.1 and 2 IFRS S2 §20 (a) and §21 (a)
Disclosure Requirements E1-8	SFDR, PAI, Indicators 1 and 2 of Table 1 of Annex 1	TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-

Disclosure Requirements	European framework references	International framework references
– Scope 2 GHG emissions	Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.5	industry, climate-related metric categories GRI 305-2 CDP, Questionnaire (2021), C6.2 and 3, C5.1 and 2 IFRS S2 §20 (a) and §21 (a)
Disclosure Requirements E1-9 – Scope 3 GHG emissions	SFDR, PAI, Indicators 1 and 2 of Table 1 of Annex 1 Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.5	TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-industry, climate-related metric categories GRI 305-3 CDP, Questionnaire (2021), C6.5, C5.2 IFRS S2 §20 (a) and §21 (a)
Disclosure Requirements E1-10 – Total GHG emissions	SFDR, PAI, Indicators 1 and 2 of Table 1 of Annex 1 Regulation (EC) No 1221/2009 (EMAS) Annex IV C 2 (c) (vi)	TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-industry, climate-related metric categories GRI 305-1, 2 and 3 CDP, Questionnaire (2021), C6.1, 2, 3 and 5, C5.1 and 2 IFRS S2 §20 (a), §21 (a) (i) and §11
Disclosure Requirement E1-11 – GHG intensity per net turnover	SFDR, PAI, Indicator 3 of Table 1 of Annex 1	TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-industry, climate-related metric categories GRI 305-4 CDP, Questionnaire (2021), C6.10 IFRS S2 §21 (a) (ii) (partially covered)
Disclosure Requirement E1-12 – GHG removals in own operations and the value chain	[Draft] CSRD Recital §41	IFRS S2 §13 (b) (partially covered)
Disclosure Requirement E1-13 – GHG mitigation projects financed through carbon credits	[Draft] CSRD Recital §41	GRI 305-5 IFRS S2 §13 (b) (partially covered)
Optional Disclosure Requirement E1-14 – Avoided GHG emissions from products and services		World Resources Institute working paper: "Estimating and Reporting the Comparative Emissions Impacts of Products" (2018)
Taxonomy DRs – Taxonomy		IFRS S2 §21 (e) (Green Capex partially covered)

Disclosure Requirements	European framework references	International framework references
Regulation for climate change mitigation and climate change adaptation		
Disclosure Requirement E1-15 –Potential financial effects from material physical risks	Commission, Guidelines on non-financial reporting: Supplement on reporting climate-related information (2019), Recommended disclosures and further guidance 3.4	TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-industry, climate-related metric categories IFRS S2 §8 (d), §14 (b), (c), (d), (e), §20 (a) and §21 (c)
Disclosure Requirement E1-16 – Potential financial effects from material transition risks		TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-industry, climate-related metric categories IFRS S2 §8 (d), §14 (b), (c), (d), (e), §20 (a) and §21 (b)
Disclosure Requirement E1-17 – Potential financial effects from climate-related opportunities		TCFD, Guidance on metrics, targets, and transition plans (2021), Cross-industry, climate-related metric categories IFRS S2 §8 (d), §14 (b), (c), (d), (e), §20 (a) and §21 (d)

BC6. Additional performance measures deemed relevant for the future enhancement of ESRS E1 are presented as part of this Basis for conclusions although these have not been included in the [Draft] Standard, as the [Draft] Standard reflects the disclosures that are needed with priority. These performance measures relate to use of green hydrogen in BC 88, energy intensity in BC 98 to 101, and GHG emissions intensity in BC 154 to 157.

BC7. Should the undertaking decide to provide information on these performance measures on a voluntary basis, it may consider best practices and preliminary orientations presented in this Basis for conclusions.

Disclosure Requirements

Strategy and business model, governance and organisation, impacts, risks and opportunities

Climate-related specific application guidance on ESRS 2 Disclosure Requirement SBM 1 (paragraph 47 (d)) on the resilience of the strategy and business model

BC8. The objective of climate-related specific application guidance on ESRS 2 DR SBM 1 (paragraph 47 (d)) is to provide an understanding of whether the undertaking's strategy and business model(s) can withstand material climate-related risks over time and under different plausible future states.

BC9. This application guidance builds on Recital 41 of the [Draft] CSRD, which states that "users are interested in knowing about undertakings' […] resilience to different climate scenarios". It is also aligned with the European Commission's non-binding guidelines on non-financial reporting, which recommend the undertaking to describe the resilience of its business model and strategy taking into consideration different climate-related scenarios over different time horizons, including ≤2°C and >2ºC scenarios. Its disclosure objective is consistent with the TCFD recommendations and [Draft] IFRS S2, which propose the entity to disclose an analysis of the resilience of the strategy to significant climate-related risks and opportunities.

BC10. This application guidance relates the scope of the resilience analysis, how the resilience analysis is conducted, and its results. This structure aims to provide the necessary transparency on the complexity and uncertainty related to the likelihood, magnitude and timing of climate-related risks and opportunities affecting the undertaking after risk remediation actions.

BC11. Paragraph AG 7 (a) supports the need for a faithful representation of the resilience analysis and strengthens comparability of the resilience results across undertakings by requiring the disclosure of the scope of the resilience analysis.

BC12. Paragraph AG 7 (b) aims to increase the understandability of how the undertaking considers the uncertainties associated with future material climate-related risks and opportunities through the disclosure of the analytical tools used, such as climate-related scenario analysis. It also aims to facilitate the robustness and verifiability of the resilience results through the disclosure of the critical assumptions made as well as the time horizons and the climate and business scenarios used.

BC13. Paragraph AG 7 (c) enables users to understand how the materialisation of the undertaking's material climate-related risks could affect the way it creates value and the mechanisms with which the strategy and business model(s) can absorb or recover from these effects.

BC14. Climate-related scenario analysis is considered a highly useful approach to test the current business model of the undertaking and its strategies against a spectrum of possible future climate states. The 2021 TCFD Status Report outlined that only 5-13 % of the surveyed companies disclosed the resilience of their strategies using scenario analysis in the periods 2018-2020. During the preparatory work leading to this [Draft] Standard it was noted that the development of common European climate-related scenarios based on the latest scientific knowledge and directly applicable by undertakings for their reporting would be useful, as it would support the verifiability of the undertaking's results and reduce its reporting burdens. However, this [Draft] Standard does not include guidelines for the development of such common scenarios as this was considered out of scope of the work of the EFRAG PTF. (see also BC 33 in section "Climate-related specific application guidance on ESRS 2 Disclosure Requirements IRO 1 and IRO 2 on materiality assessment" for more information on scenario analysis).

Climate-related specific application guidance on Disclosure Requirement ESRS 2-GOV 4 (paragraphs 64 (a) and (b)) for climate-related remuneration

BC15. The objective of climate-related specific application guidance on DR ESRS 2-GOV 4 (paragraphs 64 (a) and (b)) is to provide transparency on the governance tools implemented by the undertaking to reduce GHG emissions, ensure the achievement of GHG emission reduction targets, and address climate-related risks and opportunities.

BC16. The application guidance relies on the European Commission Guidelines, which suggest the undertaking to report on whether and how the remuneration policy takes into account climate-related performance, including performance against targets set. It builds on a similar recommendation of the TCFD 2017 recommendations and a requirement of the CDP questionnaire. It also addresses a disclosure objective consistent with the [Draft] IFRS S2 that introduces a disclosure metric on the proportion of executive management remuneration affected by climate-related considerations in the current period.

BC17. Paragraph AG 8 is considered important information for users to gain insights on whether the financial interests of the board and the management and operation levels are aligned with climate-related targets.

BC18. Paragraph AG 9 focuses on the link with the achievement of GHG emission reduction targets as this category of climate-related targets is deemed primarily significant based on the impact and financial materiality assessment.

Climate-related specific application guidance on ESRS 2 Disclosure Requirement GOV 4 (paragraph 64 (c)) for internal carbon pricing schemes

BC19. The objective of climate-related specific application guidance on DR ESRS 2-GOV 4 (paragraph 64 (c)) is to provide an understanding of how climate-related impacts, risks and opportunities are integrated into the undertaking's strategic and operational decision-making processes. Internal carbon prices are considered a useful tool in this regard which can incentivise reduction of GHG emissions and support the assessment, anticipation and management of climate-related transition risks and opportunities.

BC20. The application guidance relies on the European Commission Guidelines, which recommend reporting on how internal carbon pricing is used for climate risk management actions such as mitigation, transfer or adaptation. It also addresses a disclosure objective consistent with the TCFD final report recommendations, [Draft] IFRS S2 and CDP 2021 questionnaire, which propose the entity to disclose a metric on its internal carbon prices.

BC21. Paragraph AG 11 (a) is considered relevant information for users to understand for which purposes the undertaking uses internal carbon prices, such as informing investment decisions (e.g., R&D, operating assets, business acquisitions), valuation of potential future liabilities (e.g., from EU ETS quotas to be purchased, from future reliance on carbon credits, etc.) or as an input to financial estimates and scenarios (e.g., impairment tests, fair value measurement, growth scenarios).

BC22. Paragraph AG 11 (b) supports the provision of faithful information and comparability across undertakings by requiring the disclosure of the scope of application of carbon pricing schemes.

BC23. Paragraph AG 11 (c) and (d) allows users to understand which internal carbon prices the undertaking applies, why they are considered useful, how they were determined, and which amounts of GHG emissions have been covered by the respective scheme in the reporting year. This information will allow users to understand the purpose and incentivising character of the internal carbon prices applied by the undertaking and will increase the credibility of the disclosure.

BC24. Paragraph AG (12) is considered relevant information for users to understand the consistency between the undertaking's internal carbon prices and those used in financial statements and financial planning, such as through impairment and fair value.

Climate-related specific application guidance on ESRS 2 Disclosure Requirements IRO 1 and IRO 2 on materiality assessment

BC25. The objective of climate-related specific application guidance on DR ESRS 2-IRO 1 and IRO 2 is to provide transparency on the approach taken by the undertaking to identify and assess its climate-related impacts, risks and opportunities and the outcome of its identification and materiality assessment process.

BC26. The application guidance builds on Recital 41 of the [Draft] CSRD, which states that "users are interested in knowing about undertakings' physical and transition risks". It also addresses a disclosure objective consistent with the European Commission Guidelines, [Draft] IFRS S2, TCFD recommendations and CDP questionnaire, all of which ask the undertaking to describe processes for identifying and assessing climate-related risks and opportunities.

BC27. The application guidance is subdivided in (i) impacts on climate change (paragraphs AG 14 (a), 15 and 16), (ii) climate-related physical risks (paragraphs AG 14 (b) and 17), and (iii) climate-related transition risks and opportunities (paragraph AG 18). It reflects the disclosure on the undertaking's double materiality assessment required in ESRS 2-IRO 1 and IRO 2. From an impact materiality perspective, it is expected that most, if not all, undertakings will have to report – to varying extents – how they contribute to global climate change due to their activities and business relationships. From a financial materiality approach, it is expected that climate change will increasingly affect the operations of undertakings and their ability to create value. This may be either through physical hazards induced by climate change or through policy and market responses taken in the EU and beyond to limit climate change in line with the Paris Agreement. On the other hand, the transition to a low carbon economy and the need for climate change mitigation solutions can also bring along opportunities, e.g., for undertakings offering products and services that contribute to climate change mitigation.

BC28. Paragraphs AG 14 to 22 aim to provide relevant information for users following different purposes. There is a well-founded need among the public in general, and among investors, credit institutions and other stakeholders, who rely on an undertaking's ability to create value over the short-, medium- and long term, to understand how it impacts climate change, is exposed to climate-related transition and physical risks and identifies transition opportunities. To achieve such a comprehensive understanding, there is a need to create transparency on the material impacts, risks and opportunities, as well as on the processes the undertaking has implemented to identify and assess them. Some users, such as non-governmental organisations, require information in order to assess whether the undertaking's impact on climate change is aligned with the goal of limiting global warming to 1.5 °C in line with the Paris Agreement. Other users, such as investors, need climate-related information because the assessment of risks from investee companies increasingly requires assessing the risks that climate change poses on the undertaking's operations throughout the entire value chain.

BC29. Furthermore, paragraphs AG 14 to 22 aim to strengthen the reliability and credibility of the disclosed material climate-related impacts, risks and opportunities through the reporting of the associated identification and assessment process.

BC30. Finally, paragraphs AG 14 to 22 aim to facilitate the comparability across undertakings by establishing a systematic approach of disclosing how the undertaking has identified and assessed climate-related impacts, risks and opportunities. This approach relies on identifying a wide range of conceivable impacts, risks and opportunities that are subsequently assessed with defined criteria in order to determine those impacts, risks and opportunities that are material to the undertaking. Considering that climate-related impacts, risks and opportunities for most sectors occur in both an undertaking's own operations and its value chain, the undertaking is required to provide transparency to which degree the identification and assessment process includes value chain considerations.

BC31. Paragraph AG 15 is based on the rationale that an undertaking's adverse impacts on climate change primarily originate from its direct and indirect GHG emissions. Hence, the narrative disclosures that describe the processes for identifying and assessing impacts on climate change should include a reference to the performance measurement section on GHG emissions (ESRS E1-7 to E1-10) and align with the respective GHG accounting methodologies. However, in contrast to the quantitative reporting on GHG emissions, the disclosure proposed here should provide insights on how the undertaking identified and assessed the sources of GHG emissions under its own control and within its value chain and whether and how it considers additional impacts on climate change (e.g., emission of certain short-lived climate forcers or land use changes).

BC32. The separate disclosure of physical risks (paragraph AG 17) and transition risks and opportunities (paragraph AG 18) is premised on the conclusion that physical risks and transition risks and opportunities can affect the undertaking and its ability to create value in different ways. Paragraphs AG 17 and 18 aim to provide users with a comprehensive picture and allow an analysis of the robustness of the disclosed risks and opportunities through the reporting of the screening process conducted, the assessment criteria used, and the reliance of the identification and assessment on a range of climate scenarios. To ensure relevant information being disclosed, undertakings should state whether and how they have considered climate scenarios aligned with limiting climate change to 1.5°C for the identification and assessment of their transition risks and opportunities and high-emission scenarios for the identification and assessment of their physical risks.

BC33. Paragraph AG 19 is derived from an acknowledgement that the undertaking will be affected by climate change and related policy responses in a variety of ways. How these effects will materialise, however, is subject to uncertainty. Climate-related scenario analysis is considered a highly useful tool for the undertaking to understand this uncertainty. It can reveal the transition and physical risks and opportunities the undertaking may face under different plausible future states, how these risks may affect financial performance and position and, consequently, support to assess resilience of its strategy and business model, enabling a better decision making. Users should be able to gain an understanding of how climate-related scenario analysis has informed the risk and opportunity identification and assessment process.

BC34. Paragraph AG 22 requires the undertaking to disclose the outcome of its identification and assessment process, i.e., its material climate-related impacts, risks and opportunities. It also responds to the needs of users to better understand how climate-related impacts, risks and opportunities are related to and may affect the undertaking's value chain.

Disclosure Requirement E1-1 – Transition plan for climate change mitigation

BC35. The objective of Disclosure Requirement E1-1 is to provide an understanding of the transition plan of the undertaking and its compatibility with limiting global warming to 1.5°C.

BC36. This disclosure is derived from Art. 19a (2) (iii) of the [Draft] CSRD, which requires the reporting of "the plans of the undertaking to ensure that its business model and strategy are compatible with the transition to a sustainable economy and with the limiting of global warming to 1.5 °C in line with the Paris Agreement". The TCFD Guidance on Metrics, Targets and Transition Plans refers to "plans for transitioning to a low-carbon economy, which could include GHG emissions targets and specific activities intended to reduce GHG emissions in their operations and value chain or to otherwise support the transition". The [Draft] IFRS S2 refers to "transition plan" as an aspect of an undertaking's overall strategy that lays out its targets and actions for its transition towards a lower-carbon economy, including actions such as reducing its greenhouse gas emissions. The US Securities and Exchange Commission (SEC) Enhancement and Standardisation of Climate-Related Disclosures for Investors proposed rule (SEC Proposed rule) refers to "transition plan" as an undertaking's strategy and implementation plan to reduce climate-related risks.

BC37. A transition plan in [Draft] ESRS E1 is understood as an aspect of an undertaking's overall strategy that lays out a set of targets and actions supporting its transition toward limiting climate change to 1.5°C. The transition plan is a cross-cutting instrument that contains different elements related to strategy, policies, targets, action plans and resources. The disclosure should reference but not duplicate information from other sections of the [Draft] Standard. An undertaking's transition plan includes but is not limited to its climate change mitigation action plan. The climate change mitigation action plan is more specific and provides an overview of key actions taken or planned to achieve a GHG emission reduction target or to implement a climate change mitigation policy, including timelines, responsibilities, (expected) outcomes and allocated resources.

BC38. Users need to understand how the undertaking plans to ensure that its business model and strategy are compatible with the transition to a climate-neutral economy and with limiting global warming to 1.5 °C in line with the Paris Agreement. The TCFD recommendations assert that investors and other stakeholders are interested to understand how climate change can affect the undertaking's business strategy over the short, medium, and long term, since this informs the expectations about the undertaking's future performance.1 Civil society organisations, governmental bodies, consumers, workers and people affected by the consequences of climate change, among others, are increasingly interested to understand how the undertaking's current business model and strategy drive GHG emissions in own operations but also along the value chain and if the undertaking has a credible transition plan in place that is compatible with limiting of global warming to 1.5°C.

[1] TCFD, "Final Report Recommendations of the Task Force on Climate-related Financial Disclosures", 2017, p. 20. Available here.

BC39. Paragraph 15 (a) provides transparency on how the undertaking plans to ensure that its business model and strategy are compatible with the transition to a climate-neutral economy and with limiting global warming to 1.5 °C in line with the Paris Agreement. Limiting global warming to 1.5°C in line with the Paris Agreement necessitates a transition to a climate-neutral economy by 2050. In order to be able to create value over the short-, mid- and long-term, the undertaking needs to ensure that its business model and strategy are compatible with the required transition within these timeframes.

BC40. Paragraphs (b) and (c) aim to ensure that the transition plan is concretely translated into the undertaking's operational and financial processes, and consequently embedded into business planning. The disclosure of actions and resources supporting the implementation of the transition plan intends to demonstrate the modelling effort performed by the undertaking and the seriousness of its roadmap.

BC41. Paragraph 15 (d) regarding locked-in emissions of key assets and products indicates to users the viability of an undertaking's transition plan and GHG emission reduction targets and is an indicator of the risk of stranded assets. Locked-in emissions are understood as estimates of future GHG emissions that are likely to be caused by an undertaking's assets or sold products within their operating lifetime.

BC42. Paragraph 15 (e) considers that the role of an undertaking's Taxonomy-alignment is meaningful information that an undertaking should reflect upon in the context of its transition plan given the intention of the EU Taxonomy to classify economic activities as substantially contributing to the objective of climate change mitigation, among other objectives. The undertaking should support transparency on how their transition plans would help the achievement of the taxonomy technical screening criteria as well as how it ensures that existing or future aligned taxonomy activities do not impede or lower the ambition of its GHG emission reduction targets.

Policies, targets, action plans and resources

Disclosure Requirement E1-2 – Policies implemented to manage climate change mitigation and adaptation

BC43. The objective of Disclosure Requirement E1-2 is to provide transparency on all policy commitments in place regarding climate change mitigation and adaptation (e.g., stand-alone policy documents, codes of conduct, commitments to climate-related initiatives or alike). Stakeholders need to understand the undertaking's ability (i) to mitigate its negative impacts on climate change and to maximise its positive impact throughout the value chain and (ii) to monitor and manage its physical and transition risks and opportunities.

BC44. This Disclosure Requirement builds on Art. 19a 2 (d) of the [Draft] CSRD, which asks for a "description of the undertaking's policies in relation to sustainability matters". It is also aligned with the Commission Guidelines on non-financial reporting, which recommend the undertaking to describe any company policies related to climate, including any climate change mitigation or adaptation policy. Although the TCFD recommendations and [Draft] IFRS S2 do not refer to the concept of climate policies, it is implicitly covered by both documents. The [Draft] IFRS S2 requires entities to describe process(es) used by the undertaking to monitor and manage the climate-related risks and opportunities, including related policies. The TCFD recommendations propose the disclosure of the description of the organisation's processes for managing climate-related risks, including how decisions to mitigate, transfer, accept, or control these risks are made.

BC45. Paragraph AG 23 supports the need for clarity on mitigation versus adaptation, through the requirement to disclose separately information about policies related to climate change mitigation versus adaptation. This is because the goals, people involved, actions and resources needed to implement these policies are different.

BC46. Paragraphs AG 24 and 25 set the objective and provide examples of policies related to climate change mitigation and adaptation, as a way to enhance the comparability and facilitate the digitisation of such information.

Disclosure Requirement E1-3 – Measurable targets for climate change mitigation and adaptation

BC47. The objective of Disclosure Requirement E1-3 is to provide an understanding of the targets the undertaking has adopted to support its climate change mitigation and adaptation policies and to address its material climate-related impacts, risks and opportunities.

BC48. This disclosure relies on Art. 19a 2 (b) of the [Draft] CSRD, which requires "a description of the targets related to sustainability matters set by the undertaking and of the progress the undertaking has made towards achieving those targets". It also builds on the European Commission's non-binding guidelines on reporting climate-related information, which recommends the description of "any climate-related targets the company has set as part of its policies, especially any GHG emissions targets, and how company targets relate to national and international targets and the Paris Agreement in particular". Finally, it is aligned with the EU Climate Benchmark Regulation2, which states in Art. 6 that administrators of EU Climate Transition Benchmarks and administrators of EU Paris-aligned Benchmarks may increase in those benchmarks the weight of the issuers of the constituent securities that set and publish GHG emission reduction targets, where the following conditions are fulfilled: (a) the issuers publish consistently and accurately their Scope 1, 2 and 3 GHG emissions; and (b) they have reduced their GHG intensity or, where applicable, their absolute GHG emissions, including Scope 1, 2 and 3 GHG emissions, by an average of at least 7% per annum for at least three consecutive years.

[2] Commission Delegated Regulation (EU) 2020/1818 of July 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks. Available here.

BC49. It addresses a disclosure objective consistent with contents of the [Draft] IFRS S2, TCFD recommendations, CDP questionnaire, and Science-Based Target initiative (SBTi) net-zero standard and corporate manual. For instance, [Draft] IFRS S2 requires the disclosure of information regarding climate-related targets, including the processes in place for review of the targets, the amount of the undertaking's emission target to be achieved through emission reductions within the value chain, and the intended use of carbon offsets in achieving emissions targets. It also requires, for each climate-related target, the disclosure of metrics used to assess progress, the specific target the entity has set, whether it is absolute or intensity-based, the objective, and the timeline. Similarly, the TCFD recommends describing the targets used to manage climate-related risks and opportunities and performance against targets, including whether it is absolute or intensity-based, timeframes, base year and key performance indicators used. The ESRS E1 follows a more granular approach than these international initiatives in order to increase comparability across undertakings, for instance by requiring the disclosure of the scope of the target. It also adopts a more conservative perspective in order to limit greenwashing, for instance, by providing a strict framework for the disclosure of net-zero targets and other neutrality claims and consequently for the use of removals and carbon credits in climate-related targets.

BC50. Regarding climate change mitigation targets, stakeholders need to understand the GHG emission reductions that the undertaking intends to achieve in the future and their effectiveness in ensuring compatibility with limiting global warming to 1.5 °C. Regarding climate change adaptation targets, stakeholders need to understand how the undertaking manages physical risks resulting from climate change and reduces its vulnerability. Thus, targets for climate change mitigation and adaptation are useful forward-looking information that undertakings shall disclose. Robust climate change mitigation and adaptation target setting relies on modelling efforts that require deep integrated thinking on the business model, the market demand evolution, the products carbon intensity performance, the sourcing strategy, etc.

BC51. This disclosure includes three levels of requirements, depending on the type of target disclosed:

(a) the first level relates to all types of general climate-related targets, for example, targets on energy efficiency improvement, deployment of renewable energy, GHG emissions reduction and/or net-zero, as well as for targets related to climate change adaptation or the management of climate-related risks. These requirements are aligned with Disclosure Principle 2 in ESRS 1 and laid down in paragraph 24, left column of the table;

(b) the second level of requirements introduces additional requirements specifically for the disclosure of GHG emission reduction targets. These additional requirements are considered necessary to ensure faithful and credible reporting of GHG emission reductions and to fulfil the needs of users who want to understand the target's ambition and if the undertaking is on track in achieving the target. These requirements are laid down in paragraph 24, in the right column of the table; and

(c) the third level defines transparency required related to targets that intend to achieve net-zero GHG emissions by a certain year (paragraph 25) and GHG neutrality claims undertakings may wish to disclose and that involve the use of carbon credits (paragraph 26). These requirements were introduced to the [Draft] Standard in order to avoid greenwashing on net-zero and GHG neutrality claims. It is important to note that the focus of an undertaking's reporting under this Disclosure Requirement should be on GHG emission reduction targets, that do not include any type of netting or offsetting of an undertaking's Scope 1, 2 or 3 emissions. Especially GHG neutrality claims should not disguise the need for deep GHG reductions in the undertaking's own operations and value chain and for addressing potential lock-ins in high-carbon infrastructures. Therefore, it was decided to introduce a requirement to provide information on the credibility of carbon credits used to make a GHG neutrality claim and how the undertaking ensures that such claims do not impede or lower the ambition of its GHG emission reduction targets.

BC52. Paragraph 24 (a) will provide transparency on the relationship of the undertaking's target to its policy objectives, which ensures consistency and connectivity with the information disclosed under Disclosure Requirement E1-2 on policies implemented to manage climate change mitigation and adaption.

BC53. Paragraph 24 (b) will provide transparency on the level of ambition to be achieved by the undertaking, including whether the target is absolute or relative and in which unit it is measured. GHG emission reduction targets in absolute values shall be prioritised because absolute reductions of GHG emissions are necessary to achieve the EU target of climate neutrality and limiting climate change to 1.5°C in line with the Paris Agreement. GHG emission reduction targets in relative terms (i.e. GHG emissions per unit of production) may be disclosed in addition to related targets in absolute values, if these are deemed meaningful by the undertaking. The usefulness of disclosing relative targets is to allow for a comparison over time independently from the changes in production or sales. Such targets, however, require a robust and comparable denominator, which depends on the sector, economic activities and products and services of the undertaking. Therefore, reporting on relative targets and performance indicators may be considered by EFRAG when developing sector-specific ESRS.

BC54. Paragraph 24 (c) will provide transparency on the scope of the climate-related targets an undertaking discloses. For GHG emission reduction targets, the additional requirement seeks to ensure consistency with GHG inventory boundaries, and the information disclosed under Disclosure Requirements E1-7 to E1-10 (GHG emissions). Undertakings should disclose their GHG emission reduction targets for all three Scopes identified by the GHG protocol. They may do so through a combined target or separate targets. The purpose of the disclosure requirement is to show how the undertaking intends to reduce GHG emissions in its own operations and its value chain. Therefore, in developing this [Draft] Standard it has been assumed that GHG removals, carbon credits or avoided emissions from products and services should not be part of the disclosure on GHG emission reduction targets and progress made towards their achievement.

BC55. Paragraph 24 (d) will provide transparency on the baseline value and base year from which progress is measured. Diverging base years for climate-related targets are a key impediment to the comparability of targets. Moreover, the lack of requirements on the representativeness of the baseline value can lead to situations where the ambition level of a target may be over- or underemphasised by the reporting entity. For example, if a base year with a disproportionally high baseline value is chosen, the undertaking is able to set more "ambitious" targets as compared to a baseline value that is representative of its activities. The specific provisions in the application guidance for selecting the base year, and the requirement of a uniform base year for GHG emission reduction targets from 2025 onwards, are consequently introduced to ensure representativeness and faithful representation and improve comparability of targets over time and between different undertakings.

BC56. Paragraph 24 (e) will provide transparency on the timeframe to achieve the targets including any milestones or interim targets. The disclosure of interim targets is especially important for longer-term targets. Users should be able to understand the milestones the undertaking plans to achieve in order to meet its climate-related targets. Regarding GHG emission reduction targets, a requirement to disclose target values in five-year rolling periods is introduced, at least including a target value for 2030 and, if available for 2050. It was considered that clear provisions for target years and milestones will increase comparability of undertakings' GHG emission reduction targets and support alignment with the EU climate goals (-55% in 2030 and climate neutrality in 2050). Target intervals of five years are considered an acceptable timeframe to implement management plans and monitor improvements in line with the public policy milestones. Paragraph 24 (e) also includes a presentation requirement of GHG emission reduction targets which is further elaborated and underpinned by examples in paragraph AG 30. The purpose of the presentation requirement is to assist users in evaluating the ambition level of the undertaking's GHG emission reduction target. In line with the methodology of the SBTi, the [Draft] Standard proposes that the undertaking's GHG emission reduction target is compared to a hypothetical science-based, 1.5 °C-aligned, target. The reference target value should, if available, be calculated based on sectoral decarbonisation pathways rather than on a cross-sectoral pathway. The [Draft] Standard contains a table with respective reduction rates that may be used by undertakings for calculating the reference target value. The sector-specific reduction rates have not yet been included in the table. The table will be completed once the sector-specific contents will be available.

BC57. Paragraph 24 (f) will provide insights in how the undertaking has set its GHG emission reduction targets, including the methodologies and assumptions used to define targets, as well as whether the GHG emission reduction targets are science-based or not, which has substantive influence on the users' assessments of the robustness and credibility of targets.

BC58. Paragraph 24 (h) will provide transparency on the overall progress towards the undertaking's climate-related targets. For GHG emission reduction, the undertaking is required to explain how different decarbonisation levers (e.g., energy or material efficiency and consumption reduction, fuel switching, use of renewable energy or product and process change, phase out or substitution) will contribute to the achievement of the target. This will further demonstrate to users how robust the decarbonisation pathway of the undertaking is and how it will be operationalised. For consistency, the application guidance introduces a cross-reference to the climate change mitigation action plan (ESRS E1 Disclosure Requirement 4), which is also referenced in ESRS E1 Disclosure Requirements 1 on transition plans for this purpose. It is important to note that the decarbonisation levers are not expected to be precise forecasts of GHG emission reductions. These are rather intended as indicative estimates derived from the undertaking's short-, medium- and long-term plans to reduce emissions in its own operations and value chain. For users, it will be important to understand the assumptions of the undertaking in determining the decarbonisation levers and whether these depend on new, maybe currently inexistent or not market-ready technologies, and whether they were derived by considering different climate scenarios to detect relevant environmental-, societal-, technology-, market- and policy-related developments.

BC59. Paragraphs 25 and 26 acknowledge that an increasing number of undertakings commit themselves to reaching net-zero GHG emissions or are claiming climate or GHG neutrality. In preparing this [Draft] Standard, it was considered that there is no consensus on the definition and methodologies for net-zero and GHG neutrality at an enterprise level, and international debates are ongoing (e.g., under the UNFCCC Race to zero, a new UN high-level expert group on net-zero commitments, the SBTi, CDP or the work on ISO 14068 "Carbon neutrality"). The SBTi's Net-zero standard issued in late 2021 can be considered the most mature approach to date for setting short- and long-term GHG emission reduction targets in line with a 1.5°C scenario that will eventually lead to net-zero emissions on the enterprise level. To reach net-zero, the SBTi net-zero standard suggests that an undertaking must achieve its long-term emission reduction target, i.e. reducing its GHG emissions by at least 90%, and neutralising the unavoidable, residual emissions by means GHG removals. This is in contrast to frequently perceived market practice where undertakings claim GHG neutrality for a certain reporting year based on the use of carbon credits to offset or compensate their GHG emissions in the respective year. Therefore, this [Draft] Standard has been prepared on the assumption that the disclosure requirements should differentiate between net-zero targets, based on the understanding of the SBTi net-zero standard (paragraph 25), and other GHG neutrality claims that involve the use of carbon credits and offsetting (paragraph 26). In both cases, however, the aim of the [Draft] ESRS E1 is to create transparency on what is behind "net-zero" and "GHG neutrality" to avoid greenwashing and misleading users. Consequently, the undertaking is expected to provide information on GHG emissions covered, the assumptions made, and the methodologies and frameworks applied.

BC60. In the preparatory work leading to the development of this [Draft] Standard, it was considered that further guidelines on sector carbon budgets, related emissions scenarios and allocation approaches at European level would be helpful for the undertaking to set and disclose net-zero targets. However, this [Draft] Standard does not include guidelines for the development of such budgets, scenarios and approaches as this was considered out of scope of the work of the EFRAG PTF.

BC61. Other Disclosure Requirements on energy and climate-related targets have been considered and may be retained in future updates of this [Draft] Standard or in future sector-specific standards to address specific EU policy objectives, particularly in relation to buildings, transport and the use of information and communication technology (ICT):

(a) activity energy intensity for undertakings belonging to the sectors that have high climate impact (expressed in kWh/unit of production);

(b) office energy intensity for all undertakings (office buildings occupied as tenant or owner expressed in kWh/m^2);

(c) GHG intensity of the undertaking's tertiary activities (occupied offices buildings and business travels expressed as kg CO_2eq/FTE);

(d) GHG intensity of the undertaking's logistics (transportation of goods expressed in tonnes CO_2 eq/tonnes of goods transported, covering tier 1 upstream and downstream, paid or not paid transportation); and

(e) absolute or intensity targets on ICT-related GHG emissions reductions (such as cloud computing and data centre services).

Disclosure Requirement E1-4 – Climate change mitigation and adaptation action plans and resources

BC62. The objective of Disclosure Requirement E1-4 is to provide transparency on the key actions and resources taken and planned to achieve climate-related targets and to manage GHG emissions, transition and physical risks and opportunities. It informs on the credibility of the undertaking's policies, strategy and business model with regards to climate change by demonstrating that they are embedded into the business planning.

BC63. Users are interested in forward-looking action plans and financial decisions that are driven by their climate policies and targets. In particular, when the undertaking develops and discloses a climate change mitigation action plan, it provides certainty to users that the company is adhering to its short-, medium- and long-term climate goals and that its business model will continue to be relevant in a net-zero carbon economy. Disclosing the resources allocated to such action plans enables users to assess the reliability and robustness of such plans.

BC64. This Disclosure Requirement builds on Art. 19a 2 (e) (iii) of the [Draft] CSRD, which requires a description of any actions taken, […], to prevent, mitigate or remediate [actual or potential adverse impacts]". It is also aligned with the Commission Guidelines on non-financial reporting, which recommend that the undertaking should demonstrate the consistency of its actions related to climate change in assessing its performance through target setting and reporting against the targets.

BC65. While the [Draft] IFRS S2 and TCFD recommendations do not use the term "action plans", the [Draft] IFRS S2 requires the disclosure of "adaptation and mitigation efforts" and the TCFD recommendations propose the description of "adaptation and mitigation activities". More specifically, the [Draft] IFRS S2 provides examples of direct efforts such as changes in production processes or the introduction of efficiency measures, as well as indirect efforts such as working with customers and supply chains or use of procurement. And the TCFD recommendations propose disclosing specific activities intended to reduce GHG emissions in their operations and value chain or to otherwise support the transition.

BC66. The [Draft] IFRS S2, TCFD recommendations and CDP questionnaire all refer to the concept of “financial planning”, which can be interpreted as being related to the ESRS concept of “resources”. The [Draft] IFRS S2 requires the disclosure of how climate-related risks and opportunities are included in the entity’s financial planning, while the TCFD recommendations suggest disclosing the actual and potential impacts of climate-related risks and opportunities on the organisation’s financial planning. Moreover, these guidance introduce the metric of "capital deployment" as the amount of capital expenditure, financing, or investment deployed toward climate-related risks and opportunities, which can also be interpreted as an equivalent of the ESRS concept of “resources”.

BC67. This Disclosure Requirement is structured into two parts – the actions (paragraph 30 (a), AG 32 and AG 33); and the resources (paragraph 30 (b), AG 34 and AG 35). This structure aims to demonstrate that policies and targets are incorporated into the undertaking’s operational and financial processes.

BC68. While requiring the disclosure of action plans and resources for both climate change mitigation and adaptation, paragraph 30 focuses on climate change mitigation, as actions and resources to reduce GHG emissions and limit climate change are deemed to be primarily significant based on the impact materiality assessment.

BC69. The Application Guidance of Disclosure Requirement E1-4 establishes consistent rules for the disclosure of action plans and resources in order to make the information more reliable and comparable.

BC70. Paragraphs AG 33 (a) and (c) promotes coherence between the Disclosure Requirements E1-4, and E1-3 and climate-related specific application guidance on DR ESRS 2-IRO 1 and IRO 2. In particular, paragraphs AG 33 (a) requires linking the key actions disclosed in Disclosure Requirement E1-4 with major risks and opportunities disclosed in Disclosure Requirement E1-3. And paragraphs AG 33 (c) requires linking climate change mitigation actions disclosed in Disclosure Requirement E1-4 with the decarbonisation levers disclosed in climate-related specific application guidance on DR ESRS 2-IRO 1 and IRO 2.

BC71. Paragraphs AG 33 (b) and (c) enable the undertaking to clarify how it intends to achieve its GHG emission reduction target, and consequently, to demonstrate its modelling effort and the seriousness of its roadmap. The expected outcomes may depend on many external factors and this forward-looking information is rather indicative. But with expected outcomes, the target is no longer a top-down decision for communication purposes, it becomes a strategic plan embedded into the business planning and operations.

BC72. Paragraph AG 34 aims that the undertaking demonstrates that the climate action plan is fully embedded or to be fully embedded into its business and financial planning. This should foster integrated thinking and reporting. While both CapEx and OpEx related to the climate action plan should be disclosed, only CapEx is easy to identify but reporting systems are usually not structured to identify OpEx relating to a climate action plan. The identification of FTE dedicated to a climate action plan is also difficult due to the fact that many people managing climate are part-time. As a precise definition of OpEx related to climate action plans is still not available, the disclosure of OpEx should remain indicative. R&D expenditures are already required under financial reporting standards.

BC73. Paragraph AG 35 aims to ensure consistency between the amounts of CapEx and OpEx disclosed in Disclosure Requirement E-4 and these metrics presented under the Taxonomy Article 8 disclosures. When it comes to the CapEx plan, the one requested under Article 8 of the Taxonomy Regulation may well fit the purpose. But the disclosure of CapEx and OpEx should not be limited or restricted to the Taxonomy Article 8 disclosures, as the CapEx and OpEx associated with activities non-eligible to the Taxonomy might also be relevant to the action plans for climate mitigation and adaptation. Accordingly, climate-related CapEx and OpEx may be higher but not lower in amount than these metrics disclosed under the Taxonomy regulation.

Performance measures

Disclosure Requirement E1-5 – Energy consumption and mix

BC74. The objective of Disclosure Requirement E1-5 is to provide an understanding of the undertaking's absolute energy consumption, its improvement in energy efficiency and the share of renewable energy in its overall energy mix.

BC75. This subtopic provides relevant information for users according to the impact materiality assessment.

BC76. Energy accounts for a significant share of worldwide GHG emissions, and energy-related activities represent the most significant GHG emission sources for many sectors such as industrials, transportation and construction/real estate activities. In particular, the combustion of fossil fuels such as coal, oil and gas emits carbon dioxide gas into the atmosphere. Globally, energy use accounts for around three-quarters of GHG emissions and two-thirds of the growth of GHG emissions3. In the European Union, the energy sector contributes over 75% of total GHG emissions4. In addition to its significant contribution to climate change, it is commonly agreed that human production and use of energy have further impacts on the environment and society.

BC77. Based on the above, the reporting on energy consumption and its breakdown by sources is a primary input for the calculation of direct and indirect GHG emissions. It reflects the dependence of the undertaking on different types of fossil fuels, each being associated with GHG emissions and other environmental and social impacts. Over time, the breakdown by non-renewable and renewable sources enables preparers and users to track efforts for decarbonising the undertaking's energy mix and its extent of deployment of renewable energy.

[3] IEA, "Net Zero by 2050 a Roadmap for the Global Energy Sector", 2021. Available here. IAE, "Global Energy and CO_2 Status Report", 2019). Available here.

[4] Proposal for a Directive COM/2021/557 of the European Parliament and of the Council amending the Directive (EU) 2018/2001 of the European Parliament and of the Council, Regulation (EU) 2018/1999 of the European Parliament and of the Council and Directive 98/70/EC of the European Parliament and of the Council as regards the promotion of energy from renewable sources, and repealing Council Directive (EU) 2015/652. Available here.

BC78. Consequently, this Disclosure Requirement is also important because it supports the EU Energy Efficiency and Renewable Energy policies aiming at reducing energy use and developing the share of renewable energy. In this context, companies have two main levers for action to combat climate change and lower their environmental footprint throughout the generation, transmission, distribution and end-use of energy. They must decarbonise their energy mix by getting rid of fossil fuel sources and opting for renewable and low-carbon energy sources. And they must save energy by reducing energy consumption and using energy more efficiently.

BC79. Hence, the [Draft] CSRD states that "achieving a climate-neutral […] economy […] requires the full mobilisation of all economic sectors", in particular "reducing energy use and increasing energy efficiency is key in this respect as energy is used across supply chains". It concludes that "energy aspects should be duly considered in sustainability reporting standards, in particular in relation to environmental matters".

BC80. This subtopic also provides relevant information for users according to the financial materiality assessment.

BC81. Decarbonising industrial processes and saving energy allow the undertaking to enhance its competitiveness in terms of cost reductions, limit its environmental liabilities, and grants better preparation for future environmental regulations, thereby decreasing the transition risk exposure of the undertaking.

BC82. Moreover, the disclosure of energy consumption and mix in absolute value provides key performance indicators that allow providers of financial capital to assess the level of financial risk stemming from energy consumption linked to GHG emissions. It is observed that energy-based metrics are required by both the SFDR and European Supervisory Authorities ('ESAs') in their supervisory rulebooks for financial institutions to assess climate-related risks that could affect financial stability.

BC83. Paragraph 33 meets the requirement on the share of non-renewable energy consumption compared with renewable from the SFDR. It has also been adapted from the CDP questionnaire and GRI Standards relating to energy consumption of the organisations.

BC84. The Application Guidance of Disclosure Requirement E1-5 establishes consistent rules for the disclosure of energy consumption and mix in order to make the information reliable and comparable.

BC85. Paragraph AG 36 (a) supports the need for consistent information by linking the perimeter of the reported energy consumption in relation to the perimeter of the reported Scope 1 and 2 GHG emissions.

BC86. Paragraph AG 36 (e) requires that all quantitative energy-related information shall be reported in terms of final energy consumption as final energy is easier to collect for preparers and such reporting is the most frequent market practice.

BC87. Paragraph AG 36 (k) aims to ensure the faithful representation of the information disclosed by setting a conservative approach when splitting the electricity, steam, heat or cooling energy between renewable and non-renewable sources.

BC88. An additional energy-related indicator deemed relevant for the enhancement of the ESRS is identified for the future sector-specific standards. Undertakings that pursue activities in the sectors for which the use of hydrogen is relevant may disclose the share of green hydrogen in the total energy consumption (%). The disclosure aims to support EU sub-targets for renewable hydrogen and hydrogen-based synthetic fuels in transport (2.6%) and in industry (50% share in hydrogen consumption) from the proposal for a revised Renewable Energy Directive in the "Fit for 55" Package. It should be closely aligned with the related EU legislation still under discussion.

Disclosure Requirement E1-6 – Energy intensity per net turnover

BC89. The objective of Disclosure Requirement E1-6 is to meet the information needs of financial market participants subject to the SFDR. It allows an understanding of the energy intensity in high climate impact sectors.

BC90. The SFDR will require financial market participants to disclose the energy intensity per revenue of their investee companies. It is, therefore, necessary that undertakings pursuant to the [Draft] CSRD report that information through the ESRS. Indeed, preparers/investee companies have an insight position (knowledge of energy and revenues details) allowing to finetune the calculation of the energy per revenue ratio (adjustment of the perimeter for both numerator on energy consumption and denominator on revenues) and are better positioned to do this than the financial market participants (investors or analysts) themselves.

BC91. The concepts of "energy efficiency" and "energy intensity" are interrelated. The IPCC specifies that energy efficiency is often described by energy intensity while providing definitions of both terms. "Energy efficiency: means "the ratio of output or useful energy or energy services or other useful physical outputs obtained from a system, conversion process, transmission or storage activity to the input of energy". 'Energy intensity' describes "the ratio of economic output to energy input in economics".

BC92. This subtopic provides relevant information according to both the impact and financial materiality assessments.

BC93. The IPCC's Special Report on Global Warming of 1,5°C states that 1.5°C pathways include energy-demand reductions through efficiency improvements and demand-reduction measures. Thus, energy efficiency coupled with energy use reduction (sobriety) are generally considered in policy as the primary measures to reduce energy demand through technological options such as insulating buildings, more efficient appliances, efficient lighting, efficient vehicles, etc.

BC94. More specifically, the European Commission's proposal for a new Energy Efficiency Directive outlines that "while the energy savings potential remains large in all sectors, there is a specific challenge related to transportation sector, as it is responsible for 30% of final energy consumption, and to buildings sector, since 75% of the Union building stock has a poor energy performance". "Another important sector to which increasing attention is being paid is the information and communications technology (ICT) sector, which is responsible for 5-9% of the world's total electricity use and more than 2% of all emissions".

BC95. In addition to climate mitigation, energy efficiency is a way to meet social needs. It has been identified as the most effective solution to alleviate energy poverty and overcome some of the potential negative distributional impacts of pricing measures. The Covid19 crisis stressed the urgency of addressing energy poverty in the European Union with more Europeans struggling to afford access to essential energy, particularly in the context of rising energy costs and unemployment. Medium-income households might be at an increasing risk of facing energy poverty in the near future, since currently the majority of households affected by energy poverty are (lower) middle-income households.

BC96. The usefulness of energy intensity per revenue is to allow users to compare companies from one year to another, eliminating perimeter effects (potential acquisitions/divestments in assets for instance that could increase/reduce absolute GHG emissions). It also enables comparability between organisations in the same sector.

BC97. Although the disclosure of energy intensity per revenue fosters comparability, intensity ratio per revenue is not the most relevant and reliable indicator for non-financial sectors for the below reasons:

(a) it may be less environmentally robust due to the volatility of economic metrics;

(b) it may not be correlated with emissions tied to physical production processes, especially for sectors with high price fluctuations; and

(c) target progress may be difficult to track if undertakings experience financial losses in certain years.

BC98. Therefore, two additional intensity indicators deemed relevant for the future enhancement of the ESRS are identified, although they are not prioritised for this [Draft] Standard.

BC99. The first one relates to the energy intensity per activity (MWh/unit of production) and are relevant to the undertakings that pursue activities in high climate impact sectors. Denominators that rely on sectoral production units are considered to increase the quality and relevance of information. However, since these denominators are only comparable for companies in the same sector, the disclosure is particularly relevant for companies belonging to high climate impact sectors and hence should be considered for sector-specific standards.

BC100. To calculate the energy intensity per activity, numerators of the related ratios should be based on the same perimeter (in terms of activities covered) as the denominators for consistency reasons. This means that the absolute values of the Disclosure Requirement E1-5 (Energy consumption and mix) should be considered as the source of the data but may have to be split by activity (if several) in order to match with production units per activity. Energy intensity should therefore be disclosed with disaggregation by activity or operating segments /business unit and the denominator should be designed to use a relevant activity-specific metric.

BC101. The second one relates to the energy intensity of buildings (MWh/m2) in order to be aligned with EU green buildings objectives and to support the proposal for recasting the EU Energy Efficiency Directive. Since all undertakings are occupying offices, the disclosure is relevant for all undertakings whatever the sector. However, this disclosure requirement will only be part of a later set of ESRS (i.e., sector-specific ESRS that will be issued later), as it must be segmented by building types (offices, hotels, shopping centres, etc.) according to sector-specific standards.

Disclosure Requirements E1-7, E1-8, E1-9, E1-10 – GHG emissions

BC102. The objective of Disclosure Requirements E1-7 to E1-10 is to provide transparency on the GHG emissions arising from the undertaking's activities. The disclosure of GHG emissions is a central component of the ESRS E1, which encompasses the calculation of three scopes of calculation: Scope 1 covering direct emissions from owned or controlled sources; Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company; and Scope 3 including all other indirect emissions that occur in a company value chain. The disclosure of GHG emissions is a prerequisite for measuring progress toward reducing GHG emissions in accordance with the undertaking's climate-related targets and EU policy goals as well as for the assessment of the undertaking's transition risks.

BC103. Taking into account the three scopes of GHG emissions allows for a holistic view of an undertaking's contribution to climate change, the correct identification of risks that may arise along the value chain, and potential areas for GHG emission reductions.

BC104. The Disclosure Requirements E1-7 to E1-10 build on the definitions and rules of the GHG Protocol to reduce the burden for the undertakings that already apply the GHG Protocol, as this framework is considered the leading accounting standard for GHG emissions.

BC105. As outlined by the latest IPCC reports, human activities, notably in the industrials, buildings, transportation, energy and agriculture sectors, represent the main sources of GHG emissions. These activities increase the CO2 concentration in the atmosphere, causing an additional greenhouse effect and generating radiative forcing. This results in an imbalance between carbon sources and sinks, which disturbs the distribution of the energy budget on the earth. The accumulated energy leads to the warming of the ocean (93% of the energy budget), the melting of the ice (3%), the dissipation into the ground (3%), and the warming of the atmosphere (1%). These phenomena trigger environmental consequences, including but not limited to the increase in water and soil temperatures, the sea level rise, the melting of glaciers and ice caps, the changes in ocean currents, the disruption of the water cycle (floods, droughts, submersions, cyclones), extreme events (heat peaks, fires), the increase in the ozone hole, the decline in marine and land biodiversity, and the decrease in freshwater resources. They further raise social issues, including but not limited to the impacts on human health (displacement of endemic areas for diseases, increase in microbial diversity, rising heat-related mortality, etc.), the decrease in agricultural yields, the multiplication of famines, the increase of climate refugees and geopolitical risks.

BC106. The IPCC's Sixth Assessment Report on Climate Change5 stresses that human-induced climate change is already affecting many regions across the globe, e.g., by heatwaves, heavy precipitation, droughts, increasing amount and intensity of tropical cyclones or rising sea levels. Human influence has warmed the climate at a rate that is unprecedented in at least the last 2000 years. In 2019, atmospheric carbon dioxide (CO2) concentrations were higher than at any time in at least 2 million years, and concentrations of methane (CH4) and nitrous oxide (N2O) were higher than at any time in at least 800,000 years. Since 1750, increases in CO2 (47%) and CH4 (156%) concentrations far exceed, and increases in N2O (23%) are similar to, the natural multi-millennial changes between glacial and interglacial periods over at least the past 800,000 years.

[5] IPCC, "Sixth Assessment Report on Climate Change", 2021. Available here.

BC107. The IPCC's 2018 Special Report on Global Warming of 1,5°C insists on the clear benefits to people and natural ecosystems of limiting global warming to 1,5°C compared to 2°C.

BC108. In this context, since 2015 the EU Member States are committed to the Paris Agreement which entails limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C above pre-industrial levels.6 And the governments are expected to increase efforts in climate change mitigation and adaptation as the consequences of climate change for humans and ecosystems become more frequent and prominent.

BC109. At the EU level, the European Green Deal7 was launched in 2019 with the aim to tackle current climate and environmental challenges. As one of the key elements of the European Green Deal, the European Climate Law8 enshrines the EU's commitment to reaching climate neutrality by 2050 and the intermediate target of reducing net GHG emissions by at least 55% by 2030, compared to 1990. By 2050, the EU's GHG emissions must be net zero9 and economic growth decoupled from resource use.

BC110. In July 2021, the European Commission published the "Fit-for-55" package10. It consists of a chapeau Communication and 15 interconnected legislative proposals, aiming to deliver the European Green Deal and set the EU's climate and energy framework on course to meet the new target of reducing GHG emissions by at least 55% by 2030 compared to 1990 levels. It notably includes: a review of the EU ETS, a proposal for establishing a Carbon Border Adjustment Mechanism (CBAM) and several other initiatives, including an update of the Energy Taxation Directive; a new social climate fund to protect vulnerable households; stricter emissions standards for cars (proposing to end the sale of petrol and diesel cars and vans from 2035); new energy efficiency standards for buildings; new targets for renewable energy and land use and forestry, and new requirements for the aviation and maritime shipping sectors.

BC111. Based on the above, new policies and additional market-based incentives can drive significant reductions in GHG emissions and can direct the EU economy towards a low-carbon and resilient trajectory. This can create substantive opportunities for undertakings but also poses risks to undertakings, if they are unable to adjust their business models.

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[6] EU's ratification of the Paris Agreement, 2016. Available here.

[7] Communication from the Commission the European Green Deal (C/2019/640). Available here.

[8] Amended Proposal for a Regulation COM/2021/563 of the European Parliament and of the Council on establishing the framework for achieving climate neutrality and amending Regulation (EU) 2018/1999 (European Climate Law). Available here.

[9] According to the glossary of the IPCC, net zero CO_2 emissions are achieved when anthropogenic CO_2 emissions are balanced globally by anthropogenic CO_2 removals over a specified period. Net zero CO_2 emissions are also referred to as carbon neutrality.

[10] Communication from the Commission 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality (C/2021/550). Available here.

BC112. From the impact materiality perspective, accounting and disclosing quantitative information on GHG emissions fulfils the purpose of informing users on how the undertaking is progressing towards reducing its GHG emissions in line with its climate targets. This is essential information for external stakeholders and the undertaking itself to monitor – on an ongoing basis – whether the undertaking is on a trajectory towards net zero and, as such, whether it supports the respective EU policy goals. Hence, the [Draft] CSRD11 states in recital 41 that with regard to climate-related information, users are "interested in the level and scope of GHG emissions attributed to the undertaking".

BC113. From the financial materiality perspective, users that rely on the ability of the undertaking to create value must be able to obtain a comprehensive understanding of the extent to which GHG emissions throughout an undertaking's value chain affect its risk profile.

Disclosure Requirement E1-7 – Scope 1 GHG emissions

BC114. The objective of Disclosure Requirement E1-7 is to provide an understanding of the direct impacts of the undertaking on climate change and the part of its GHG emissions that are regulated under emission trading schemes.

BC115. The disclosure of Scope 1 GHG emissions is required by the SFDR and recommended by the European Commission's non-binding guidelines on reporting climate-related information. It is also aligned with the [Draft] contents of the [Draft] IFRS S2, SEC proposed rule, TCFD recommendations, GRI Standards and CDP questionnaire.

BC116. Paragraph 40 (a) allows users to monitor the performance of the undertaking's Scope 1 GHG emissions and to undertake evolution analysis over time.

BC117. Paragraph AG 45 supports the provision of faithful, comparable, and verifiable information when compiling the information required under paragraph 40 (a), as it establishes consistent rules for the reporting perimeter and calculation method for Scope 1 GHG emissions.

BC118. Paragraph AG 45 (c) builds on the GHG Protocol, which requires that CO2 emissions arising from biogenic sources (i.e., biomass combustion) should be reported independently from the "scopes."

BC119. Paragraph AG 45 (d) requires, in accordance with the GHG Protocol, the disclosure of Scope 1 GHG emissions in gross terms, excluding any purchased, sold or transferred carbon credits or GHG allowances. This is due to two main limits associated with offsets. First, they are a source of greenwashing if they do not fulfil stringent quality criteria, and even by the best standards, there are still uncertainties related to the temporal aspects of carbon sequestration, the potential risks of carbon release through deforestation, fire, disease and drought. Second, they can lead to disguising the need for GHG reductions in the undertaking's own operations and value chain and lock-in high-carbon infrastructures. Indeed, offset schemes make it difficult to see the evolution of the actual greenhouse gas emissions over time, and this can give a false impression that climate risks can be easily eliminated.

[11] Proposal for a directive of the European Parliament and of the Council amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. Available here.

BC120. Paragraph 40 (b) is a way to calculate the potential financial effects related to emission trading, which is a prerequisite for understanding the undertaking's transition risks (see Disclosure Requirement E1-16 on potential financial effects of transition risks) and ensures consistency with existing reporting requirements under the EU ETS.

BC121. Paragraph AG 46 (a) and (c) aim to ensure consistency between the scope and accounting period of Scope 1 GHG emissions disclosed under paragraph 40 (b) and GHG emissions regulated under the ETS.

Disclosure Requirement E1-8 – Scope 2 GHG emissions

BC122. The objective of Disclosure Requirement E1-8 is to provide an understanding of the indirect impacts on climate change caused by the undertaking's consumed energy regardless of whether it is externally purchased or acquired.

BC123. The disclosure of Scope 2 GHG emissions is required by the SFDR and recommended by the European Commission's non-binding guidelines on reporting climate-related information. It also addresses a disclosure objective consistent with the contents of [Draft] IFRS S2, SEC proposed rule, TCFD recommendations, GRI Standards and CDP questionnaire.

BC124. Paragraph 43 (a) and (b) and the related paragraph AG 47 (d), (e) and (f) allow ESRS to be aligned with the GHG Protocol Corporate Standard and Scope 2 Guidance and the GRI 305 (Emissions 2016) that require both location-based and market-based values. Moreover, both approaches have inherent advantages and drawbacks and a choice by the preparer in favour of one or the other could undermine comparability. The location-based method reflects the average emission intensity of the grids from which the electricity is taken. The market-based method reflects the emissions from electricity that companies have chosen (or not) on the market. Contractual instruments used include energy Attribute Certificates (RECs, GOs, I-RECs, …), direct contracts, supplier-specific emission factor, and emission factors representing energy and emissions not tracked or unclaimed (residual mix).

BC125. Paragraph AG 47 (a) and (i) acknowledge that the principles and provisions of the GHG Protocol Scope 2 Guidance are widely used by undertakings and are generally accepted.

BC126. Paragraph AG 47 (b), (g) and (h) support the provision of faithful, comparable, and verifiable information when compiling the information required under paragraph, as it establishes consistent rules for the reporting perimeter of Scope 2 GHG emissions.

BC127. Paragraph AG 47 (c) supports the need for consistency in the undertaking's GHG inventory by requiring the avoidance of double counting between Scope 1, 2 and 3 GHG emissions.

BC128. Paragraph AG 47 (g), in accordance with the GHG protocol, requires the undertaking to disclose biogenic emissions of CO2 from the combustion or biodegradation of biomass separately from the Scope 2 GHG emissions.

BC129. Paragraph AG 47 (h) requires the disclosure of Scope 2 GHG emissions in gross terms, excluding any purchased, sold or transferred carbon credits or GHG allowances. This is due to the limits associated with offsets and described in BC 165.

Disclosure Requirement E1-9 – Scope 3 GHG emissions

BC130. The objective of Disclosure Requirement E1-9 is to provide an understanding of the GHG emissions that occur in the undertaking's value chain beyond its Scope 1 and 2 GHG emissions. For many undertakings, Scope 3 GHG emissions are the main component of the GHG inventory and are an important driver of their transition risks.

BC131. Accounting and reporting on Scope 3 GHG emissions pose difficulties for preparers because the related GHG emission sources are not under the direct control of the undertaking. However, the 2021 TCFD status report shows that progress in Scope 3 data and methodologies has been made over the last years. Moreover, Scope 3 GHG emissions often account for the bulk of the undertaking's carbon footprint and can create risks for the undertaking's own operations, products and services.

BC132. The disclosure of Scope 3 GHG emissions is required by the SFDR and recommended by the European Commission's non-binding guidelines on reporting climate-related information. It also addresses a disclosure objective that is consistent with the contents of the [Draft] IFRS S2, SEC Proposed rule, TCFD recommendations, GRI Standards and CDP questionnaire.

BC133. Paragraph 46 aims to simplify Scope 3 reporting from a practical point of view and for purpose of presentation by reducing the amount of Scope 3 categories and summarising the 15 categories from the GHG Protocol into five overarching categories. This clustering does not impair the requirement to compile the necessary information based on the 15 categories introduced by the GHG Protocol Corporate Standard.

BC134. Paragraph AG 48 (a) acknowledges that principles and guidance provided by the GHG Protocol are widely used by undertakings and generally accepted.

BC135. Paragraph AG 48 (b) considers that the GHG Accounting and Reporting Standard for the Financial Industry from the Partnership for Carbon Accounting Financial (PCAF) is the most appropriate accounting and reporting framework for financial institutions in line with the recommendations of the European Banking Authority (EBA). PCAF Standard forms an extension to the GHG Protocol Corporate Value Chain which refines and expands the GHG Protocol's accounting rules for Scope 3, category 15 (investments), it replies to the need of FIs to measure the absolute emissions of their loans and investments.

BC136. Paragraph AG 48 (c) and (d) suggest that not all 15 categories identified in the GHG Protocol have to be part of Scope 3 reporting in order to reach a reasonable cost-benefit balance. It is suggested to refrain from a fixed threshold and rather to follow a criteria-based approach as developed by the GHG Protocol and ISO. With regard to the quantitative significance of total Scope 3 emissions, TCFD recommendations refer to a 40% threshold and the SBTi[12] states that "if Scope 3 emissions compose over 40% of total Scope 1, 2, and 3 emissions, companies shall develop ambitious Scope 3 targets that collectively cover at least two-thirds Scope 3 emissions".

BC137. Paragraph AG (e) acknowledges that Scope 3 information is expected to mature over time. Rough estimates are therefore legitimate and acceptable from the start. However, these estimates are expected to be improved over time.

[12] SBTi, "Corporate Manual", 2021. Available here.

BC138. Paragraph AG 48 (f) allows the undertaking to update the Scope 3 inventory every three years for proportionality reasons, as Scope 3 emissions are often estimates that are based on external data that is difficult to collect. However, in order to ensure the faithful representation of the information, it specifies that the inventory shall be updated earlier in the event of substantial changes to the undertaking itself (e.g., through mergers and acquisitions) or its value chain (e.g., through the substitution of a key raw material for production).

BC139. Paragraph AG 48 (g) aims to encourage the use of the most accurate data by requiring the undertaking to disclose the share of emissions calculated using primary data. The GHG Protocol Scope 3 Standard allows the choice of input data including supplier-specific data, country or sector or product averages, and proxies. However, to increase the accuracy of the data applied, it is recommended to use data in the following order of merit : 1) supplier-specific data; 2) an average of country before an average of sector or product; 3) proxies based on spend (nature of purchased goods and services). Moreover, despite GHG Protocol sectoral guidance, more sector-specific definitions are needed to improve the comparability of Scope 3 disclosures.

BC140. Paragraph AG 48 (h) supports the need for comparability and verifiability of the information by requiring transparency on the reporting scope and calculation methods used when estimating Scope 3 GHG emissions.

BC141. Paragraph AG 48 (i) supports the need for consistency in the undertaking's GHG inventory by requiring the avoidance of double counting between Scope 1, 2 and 3 GHG emissions. However, by including GHG emissions stemming from undertakings' value chain, there will be a "double counting" of emissions between undertakings, as one undertaking's indirect emissions from purchased energy and in the value chain will relate to another undertaking's emissions from operations. Nevertheless, the inherent double counting in the reporting of Scope 2 and 3 emissions does not impair the quality and understandability of a disclosure on GHG emissions. On the contrary, reporting on Scope 2 and disclosing Scope 3 is considered as an added value for stakeholders to understand the carbon footprint of an organisation and its dependencies on fossil fuels.

BC142. Paragraph AG 48 (k), in accordance with the GHG protocol, requires undertakings to disclose biogenic emissions of CO2 from the combustion or biodegradation of biomass that occur in its value chain separately from the gross Scope 3 GHG emissions.

BC143. Paragraph AG 48 (l) requires the disclosure of Scope 3 GHG emissions in gross terms, excluding any purchased, sold or transferred carbon credits or GHG allowances, due to the limits associated with offsets and described in BC 165.

BC144. Paragraph AG 51 introduces an optional disclosure of GHG emissions from purchased cloud computing and data centre services because GHG emissions from information and communication technology (ICT) services represent a significantly increasing amount of GHG emissions, and undertakings have direct and concrete levers to act on these sources. Moreover, EFRAG considers that great consideration should be given to the monitoring of ICT-related GHG emissions in the context of high energy prices.

Disclosure Requirement E1-10 – Total GHG emissions

BC145. The objective of the Disclosure Requirement E1-10 is to provide an overall understanding of the undertaking's GHG emissions and whether these occur from its own operations or the value chain. This disclosure is a prerequisite for measuring progress towards reducing GHG emissions in accordance with the undertaking's climate-related targets and EU policy goals.

BC146. The disclosure of Scope 3 GHG emissions is required by the SFDR and recommended by the European Commission's non-binding guidelines on reporting climate-related information. It also addresses a disclosure objective that is consistent with contents of the [Draft] IFRS S2, SEC proposed rule, TCFD recommendations, GRI standards and CDP.

BC147. Paragraph AG 52 is considered relevant information for the assessment of the undertaking's potential transition risks as the transition risks vary depending on the countries in which the GHG emissions occur.

BC148. Paragraph AG 53 is deemed necessary, since undertakings, especially the larger ones, are often pursuing different economic activities and business models, which can significantly differ in their GHG emissions profile. A disaggregation of GHG emissions by operating segments rather than by economic activities or sectors is recommended because the operating segments correspond to the undertaking's decision-making and are therefore easiest to track down in an undertaking's information system.

Disclosure Requirement E1-11 – GHG intensity per net turnover

BC149. The objective of Disclosure Requirement E1-11 is to meet the information needs of financial market participants subject to the SFDR. It allows an understanding of the GHG intensity normalised by revenue.

BC150. The SFDR will require financial market participants to disclose the GHG intensity per revenue of their investee companies. It is, therefore, necessary that undertakings pursuant to the [Draft] CSRD report that information through the ESRS. Indeed, preparers/investee companies have an insight position (knowledge of GHG emissions and revenues details) allowing to finetune the calculation of the GHG per revenue ratio (adjustment of the perimeter for both numerator on GHG emissions and denominator on revenues) and are better positioned to do this than the financial market participants (investors or analysts) themselves.

BC151. It is consistent with a disclosure objective consistent with the [Draft] IFRS S2, TCFD recommendations, CDP questionnaire and GRI Standards. However, the [Draft] IFRS S2 and TCFD recommendations define the denominator as a unit of physical or economic output, whereas the [Draft] ESRS E1 defines the denominator as the undertaking's net turnover.

BC152. The usefulness of GHG intensity per revenue is to allow users to compare undertakings from one year to another, normalising GHG emissions by a comparable denominator (potential acquisitions/divestments in assets for instance that could increase/reduce absolute GHG emissions). It also enables comparability between organisations in the same sector.

BC153. The disclosure of intensity ratios per revenue certainly fosters comparability, but it is, however, not the most relevant and reliable indicator for non-financial sectors for the reasons indicated in BC 97.

BC154. Therefore, three additional intensity indicators deemed relevant for the future sector-specific ESRS are identified, although they are not prioritised for this [Draft] ESRS E1 Standard.

BC155. GHG intensity per activity (tCO2e/unit of production) was considered because denominators relying on sectoral production units increase the quality and relevance of information. The disclosure was not retained for this Standard as it is sector specific.

BC156. GHG intensity per tertiary activities (tCO2e from offices and business travels per Full-Time Equivalent) was considered. The disclosure aims to address tertiary activities whatever the sector and support EU decarbonisation objectives in accordance with the European Climate Law. However, as the emission sources concerned are limited and therefore less of a priority and the perimeter of the denominator corresponding to the one of the numerator is difficult to obtain, the disclosure requirement was not retained.

BC157. GHG intensity of used upstream and downstream logistics services (tCO2e from goods transported/tons of goods transported) was considered for undertakings that pursue activities in the sectors for which the transportation of goods is relevant. The disclosure aims to address transport activities and support EU decarbonisation objectives in accordance with the European Climate Law. The disclosure was not retained as it was assessed to be sector specific.

Disclosure Requirement E1-12 – GHG removals in own operations and the value chain

BC158. Most climate scenarios compatible with 1.5°C or 2°C global warming rely on carbon removal solutions, such as Carbon Capture and Storage for Bioenergy (BECCS) or Direct Air Capture and Storage (DAC/DACCS) or natural carbon sinks. The IPCC states that “the longer the delay in reducing CO2 emissions towards zero, the larger the likelihood of exceeding 1.5°C, and the heavier the implied reliance on net negative emissions after mid-century to return warming to 1.5°C (high confidence).”13 Given the importance of GHG removals to reach global climate goals, it is considered important that undertakings provide transparency on their actions to remove and store GHGs. It is also recognised that for undertakings in biomass-based sectors, such as forestry, a significant part of their impact on climate change is a result of sequestered GHG in their own operations as well as along their value chains.

BC159. Disclosure Requirement E1-12 is derived from recital 41 of the [Draft] CSRD that states “users are interested in the level and scope of GHG emissions and removals attributed to the undertaking, including the extent to which the undertaking uses offsets and the source of those offsets”.

[13] Rogelj, J. et al. (2018, p. 93): Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_Chapter2_Low_Res.pdf

BC160. Disclosure Requirement E1-12 requires the undertaking to report GHG removals in its own operations separate from those in its value chain and separate from the GHG emissions (Disclosure Requirements E1-7 to E 1-10). This will help avoid double counting and provide transparency on the undertaking's direct and indirect efforts to remove and store GHGs. Since it may be challenging for an undertaking to account for all GHG removals in its value chain, the application guidance to Disclosure Requirement E1-12 clarifies that GHG removal activities in the value chain shall only include those that the undertaking is actively supporting, for example through a cooperation project with a supplier. GHG removals supported by an undertaking outside its value chain, for example by financing afforestation or technological removal projects, are not accounted for under Disclosure Requirement E1-12. Such removals can be considered under Disclosure Requirements E1-13 (GHG mitigation projects financed through carbon credits) if they are subject to a carbon credit the undertaking has purchased and cancelled in the reporting period. On the other hand, if the undertaking purchases carbon credits from GHG removal projects within its value chain, sometimes referred to as "insets", it should account for these removals under Disclosure Requirement E1-12 instead of E1-13, but only if the transparency and quality criteria for carbon credits are met. With these rules, the [Draft] ESRS E1 intends to ensure consistency of the undertaking's GHG inventory and to avoid double reporting of GHG removals under Disclosure Requirements E1-12 and E1-13.

BC161. The [Draft] ESRS E1 recognises that to date there are no comprehensive consensus methods for accounting and reporting on GHG removals and storage. For this reason, Disclosure Requirement E1-12 aims to provide the necessary transparency on the assumptions made and methodologies and frameworks applied by the undertaking in accounting for GHG removals (cf. paragraph 55 (c) and AG 60 (g)). More advanced methods for accounting of GHG removals are currently being developed, notably the planned EU regulatory framework for certification of carbon removals, but also the Land Sector and Removals Guidance under the auspices of the GHG Protocol, and the Forest, Land and Agriculture Science-Based Target Setting Guidance by the SBTi. To take account of these developments, the [Draft] Standard includes a dynamic requirement to apply consensus methods as soon as they are available.

BC162. GHGs can be removed and stored by biogenic (e.g., afforestation, reforestation, forest restoration, urban tree planting, agroforestry, building soil carbon, etc.), technological (e.g., direct air capture and storage), or hybrid (e.g., bioenergy with CO2 capture and storage) solutions. All of these face distinct challenges related to, for example, adverse environmental and social impacts (known and accepted, unintended or uncertain), the risks of non-permanence in the storage of removed GHGs, the maturity of the technology and its potential to be applied in large scale, etc. Because of these challenges, the [Draft] ESRS E1 requires undertakings to provide details for each removal activity, including the type of removal, the GHGs concerned, how the risk of non-permanence is managed, rules for accounting of reversals and, if the removal activity qualifies as a nature-based solution. Nature-based solutions are considered a means to circumvent various challenges connected to biogenic removals, provide additional benefits for sustainable development, and should therefore be identified as such. The United Nations Environment Assembly has recently agreed on a definition of nature-based solutions, which is referenced in the [Draft] ESRS E1. In developing this [Draft] Standard, however, it was noted that more specific criteria to qualify an action as a nature-based solution may be necessary to ensure robust reporting. The application guidance to Disclosure Requirement E1-12 moreover takes account of the fact that certain removal and

storage activities themselves can have an impact on climate change, for example, direct air capture technologies requiring large amounts of electricity that may lead to GHG emissions if this electricity is not originating from renewable sources. GHG emissions from removal activities would be covered, but also hidden, in the undertaking's gross Scope 1, 2 or 3 emissions. For this reason, the [Draft] ESRS E1 requires the undertaking to disclose the GHG emissions associated with a removal and storage activity alongside but separately from the amount of removed GHG emissions.

Disclosure Requirement E1-13 – GHG mitigation projects financed through carbon credits

BC163. The objective of Disclosure Requirement E1-13 is to provide an understanding of the extent and quality of carbon credits the undertaking has purchased from the voluntary market and cancelled in the reporting period.

BC164. The disclosure builds on recital 41 of the [Draft] CSRD, which stresses that "achieving a climate-neutral economy requires the alignment of GHG accounting and offset standards" and that "users need reliable information regarding offsets that addresses concerns regarding possible double-counting and overestimations, given the risks to the achievement of climate-related targets that double-counting and overestimations can create". It concludes that "the reporting standards should therefore specify the information undertakings should report with regard to those matters".

BC165. Since it is not possible for most undertakings to eliminate all GHG emissions associated with their activities, products and services right away, an increasing number of undertakings use carbon credits from GHG reduction or removal projects with the aim to balance or compensate their GHG emissions or claim "carbon neutrality". However, this trend in market practice is observed with caution as carbon credits and offsetting practices are limited in their effectiveness in many ways. First, they can be a source of greenwashing if the climate change mitigation project behind a carbon credit does not fulfil the stringent and verified quality criteria. Secondly, offsetting practices can lead to disguising the need for deep GHG emission reductions in the undertaking's own operations and value chain to achieve EU and global climate goals and avoid a lock-in in high-carbon infrastructures (also known as mitigation deterrence). Thirdly, GHG emissions by far exceed the amount of carbon credits potentially available. Hence, the concept of purchasing carbon credits to offset emissions cannot be considered as a viable solution on a large scale. Fourth, double counting of mitigation outcomes (towards national or EU climate targets and at the same time towards an undertakings' GHG neutrality claim) may lead to less overall climate action and can therefore be perceived as a risk for environmental integrity. Overall, in developing this [Draft] Standard it has been noted that undertakings should prioritise GHG emission reduction over offsetting and compensation practices. This principle is reflected throughout the [Draft] Standard. Disclosure Requirement E1-3 does require reporting of GHG emission reduction targets and the progress made to achieve them but excludes the use of carbon credits to claim target achievement. Disclosure Requirements E1-7-10 require reporting on gross Scope 1, 2, 3 and total GHG emissions and do not allow netting of emissions with carbon credits. Nevertheless, it is recognised that the purchase and use of carbon credits have become common market practice and reporting standards should create the necessary transparency on, if and to which extent the undertaking's climate-related policies rely on carbon credits and offsetting and whether the carbon credits purchased and cancelled by the undertaking fulfil certain quality criteria. Therefore, a Disclosure Requirement on carbon credits is introduced in the

[Draft] Standard which requires separate reporting of GHG emissions reductions or removals from carbon credits purchased and cancelled in the reporting period. This approach is in line with GRI 305-5 (Emissions 2016) and the GHG protocol corporate standard and Scope 3 standard.

BC166. Carbon credits can originate from GHG emissions reduction or removal projects that occur inside or outside the undertaking's value chain. To avoid double reporting of GHG emission reductions and GHG removals and to ensure consistency of an undertaking's GHG inventory boundaries, Disclosure Requirement E1-13 should not include amounts of emission reductions and removals associated with purchased carbon credits that occur within an undertaking's value chain (sometimes referred to as insets). In case the carbon credit is based on a GHG emission reduction in the undertaking's value chain, this emission reduction should be considered in Disclosure Requirement E1-9 (Scope 3). In case the carbon credit is based on a GHG removal in the undertaking's value chain, it should be considered in Disclosure Requirement E1-12 (removals).

BC167. Disclosure Requirement E1-13 limits the carbon credits that can be considered to those that are verified against recognised national or international quality standards. It is observed that various verification standards for climate change mitigation projects exist on the voluntary market, but there is no commonly agreed definition of a high-quality verification standard. The [Draft] ESRS E1, therefore, introduces a definition of "recognised quality standards for carbon credits" (Appendix A) which is based on a set of criteria that should be fulfilled by those standards, including that the standard is verifiable by independent third parties, the standard setter makes requirements and project reports publicly available and the standard at a minimum ensures additionality, permanence, avoidance of double counting and provides rules for calculation, monitoring, and verification of the climate change mitigation project's GHG emissions and emission reductions. With this approach, standard setters for carbon credits schemes should be able to assess if their standards are viable for reporting under ESRS E1 Disclosure Requirement 13. Vice versa, standards and carbon credits that do not fulfil the quality criteria listed in the definition would not be able to be considered under the Disclosure Requirement.

BC168. Disclosure Requirement E1-13 requires the reporting of the total amount of carbon credits in metric tons of CO2eq cancelled (or retired) in the reporting period. This may be different from the amount of carbon credits an undertaking purchases in the same period. Some undertakings buy carbon credits in bulk in order to use them for offsetting over different reporting periods. To ensure faithful and comparable reporting, it is considered that the undertaking should only account for those carbon credits under Disclosure Requirement E1-13 it cancels in the reporting period.

BC169. In addition to the total amount of GHG reductions or removals, the [Draft] ESRS E1 requires details on the type and nature of the carbon credits and related climate change mitigation projects. This includes the share of reduction and removal projects, the share by quality standard, the share from climate change mitigation projects in the EU and, if applicable, the share of carbon credits that qualify as corresponding adjustments under Art. 6 of the Paris Agreement. These details are considered necessary to allow users to understand the credibility of the disclosed information. In preparing this [Draft] Standard it was noted that based on Art. 6 of the Paris Agreement, the rules for the voluntary market for carbon credits are currently under revision, especially with regards to preventing double counting of emission reduction in national inventories and the voluntary market. The [Draft] ESRS E1 anticipates the changes to greatest extent possible to date by including a requirement to provide transparency on

the share of carbon credits that qualify as a corresponding adjustment under the Paris Agreement.

Optional Disclosure Requirement E1-14 – Avoided GHG emissions from products and service

BC170. The objective of Disclosure Requirement E1-14 is to provide transparency on the methodologies used and assumptions made by the undertaking when estimating and communicating about the impacts of their products and services on climate change in comparison to other products and services, or in comparison to a situation where their products and services did not exist. Transparency on the methodologies is key considering that there is currently no generally accepted framework for accounting and reporting on such avoided emissions.

BC171. Avoided GHG emissions are used as technical screening criteria under the Taxonomy climate Delegated Act for enabling economic activities such as provision of low carbon technology or data-driven solutions for instance. These are also voluntarily disclosed by large companies operating in the sectors enabling the transition towards a low carbon economy.

BC172. Accounting for an undertaking's Scope 1, 2 and 3 GHG emissions and for avoided emissions from products based on comparative assessments are fundamentally different but complementary concepts. Comparative impacts shall not be used to adjust Scope 1, 2, and 3 GHG emissions or claim GHG emission reduction target achievement. Finally, if reported, any estimates of avoided emissions shall be disclosed separately from the undertaking's GHG inventory.

BC173. Paragraph 61 acknowledges that there is currently no generally accepted methodology to quantify avoided emissions. Therefore, it is suggested that if the undertaking reports avoided emissions, in addition to a quantitative indicator, it shall provide details of the calculation methodology, in particular on the life-cycle emissions included, the baseline scenario chosen, and the assumptions made for determining additionality in comparison to the baseline scenario.

Disclosure Requirements E1-15, E1-16 – Potential financial effects from material climate-related risks

BC174. The manifestations of climate change can impact the undertaking's value along its value chain, and may affect its financial performance, its financial position and cash flows.

BC175. The objective of Disclosure Requirements E1-15 and E1-16 is to provide a quantitative estimation of the potential financial effects arising from material climate-related risks beyond what has already been recognised under financial reporting requirements. The material climate-related risks to which the undertaking is exposed are those resulting from the process described in ESRS 2 Disclosure Requirements 2-IRO 1 and 2- IRO 2. It is considered relevant information for users to enable effective pricing of climate-related risks and opportunities, and informed assessments of enterprise value and resilient business model, and to facilitate the efficient allocation of capital.

BC176. The Disclosure Requirements E1-15 and E1-16 build on the existing NFRD, which states that climate-related information should include both the principal risks to the development, performance and position of the company resulting from climate change, and the principal risks of a negative impact on the climate resulting from the company's activities. The Disclosure Requirements E1-15 is also aligned with the European Commission's non-binding guidelines on non-financial reporting, which recommend the undertaking to disclose the financial impacts of extreme weather events (i.e., possible indicators on days of business interruptions and associated costs, cost of repairs, fixed-asset impairment, value chain disruptions and lost revenues) and to describe how the undertaking's performance is affected by weather variability, in particular for undertakings sensitive to variability in temperature and precipitation.

BC177. The Disclosure Requirements E1-15 and E1-16 also address disclosure objectives that are consistent with the [Draft] IFRS S2 and TCFD recommendations, which also propose the disclosure of the amount and percentage of assets and business activities vulnerable to physical and transition risks without stipulating the methodology for doing this.

BC178. The subtopic is considered material from the financial materiality lens as both climate-related physical and transition risks may affect the undertaking's value over the short, medium and long term.

BC179. Regarding the physical risks' components, both acute risks (i.e., increased severity and frequency of extreme weather events) and chronic risks (i.e., longer-term shifts in precipitation and temperature and increased variability in weather patterns) can trigger economic costs and financial losses. For example, extreme temperatures or storm damage may affect the undertaking's financial performance through effects on the undertaking's premises, operations, supply chain, transportation needs and employee safety. Chronic risks also may lead to significant financial implications for the undertaking over time, such as those associated with changes in water availability, sourcing and quality, sea-level rising affecting the undertaking's premises or operations, or chronic drought affecting supply chains.

BC180. Economic losses from weather and climate-related disasters have been increasing, in particular, due to increasingly frequent climate-related extreme weather events. In the EU, these losses alone already average over €12 billion per year. Conservative estimates show that exposing the EU economy to global warming of 3°C above pre-industrial levels would result in an annual loss of at least €170 billion. Climate change affects not only the economy but also the health and well-being of Europeans, who increasingly suffer from climate physical risks such as heatwaves and floods. The deadliest natural disaster of 2019 worldwide was the European heatwave, with 2500 deaths.14

BC181. Regarding transition risks, policy, legal, technology and market changes from society's transition to a lower-carbon economy may affect the undertaking's financial position and performance due to transition risk events such as increased external carbon pricing, technological innovation, the shift of market demand for certain commodities, etc. resulting in potential asset impairments and erosions of profit margins of the undertaking.

BC182. Translation of risks into financial effects is needed in order to refine the materiality assessment and to increase comparability.

[14] Communication from the Commission Forging a climate-resilient Europe - the new EU Strategy on Adaptation to Climate (COM/2021/82). Available here.

BC183. Based on the TCFD recommendations' Guidance on Metrics, Targets and Transition Plans, financial position means the undertaking's potential assets, liabilities and equity under different climate-related scenarios. Potential effects on financial position can include the following: changes to the carrying amount of assets due to the exposure to physical and transition risks; changes to the expected portfolio value given climate-related risks and opportunities; and changes in liability and equity due to increases or decreases in assets (e.g., due to low-carbon capital investments or to sale or write-offs of stranded assets).

BC184. Based on the TCFD recommendations' Guidance on Metrics, Targets and Transition Plans, financial performance means the undertaking's potential income and expenses under different climate-related scenarios. Potential effects on financial performance can include the following: increases in revenue from new products or services from climate opportunities; increases in cost due to carbon prices, business interruption, contingency, or repairs; changes to operating cash flow from changes in upstream costs; impairment charges due to assets exposed to transition risks; and changes to total expected losses due to physical risks.

BC185. The disclosure requirements do not cover financial effects that have already crystallised as a result of climate-related risks as these should already have been reflected in the financial statements under the requirements of financial reporting. These disclosure requirements only cover potential effects that may occur in the future due to climate-related risks and do not meet the recognition and measurement requirements for inclusion in the financial statements at the reporting date.

BC186. No commonly agreed methodology exists to assess the quantitative potential financial effects of climate-related risks. Under these circumstances, the disclosures of the quantified potential financial effects from material climate-related risks are proposed without a requirement on the quantification methodology. Nonetheless, the undertaking is required to ensure it applies the most mature and accurate methodologies available in its specific field for measuring the quantitative potential financial effects of it physical and transition risks and to disclose its assumptions and the limitations of these assumptions. Climate-related scenario analysis is considered a central tool for understanding potential financial effects (see sections "Climate-related specific application guidance on ESRS 2 Disclosure Requirements IRO 1 and IRO 2 on materiality assessment" and "Climate-related specific application guidance on ESRS 2 Disclosure Requirement SBM 1 (paragraph 47 (d)) on the resilience of the strategy and business model" for more information on scenario analysis).

BC187. Given the lack of agreed methodology to quantify potential financial effects from material climate-related risks, in developing this [Draft] Standard it was considered that the disclosure of potential net financial effects after mitigation cannot be requested as a mandatory disclosure requirement. The disclosure requirements are thus voluntarily limited to the potential financial effect before mitigation.

BC188. Based on the 2021 TCFD status report, challenges associated with the reporting of potential financial effects from climate-related risks include: difficulties of organisational alignment, data, risk evaluation and the attribution of effects in financial accounts; longer time horizons associated with climate-related risks compared with business horizons; and securing approval to disclose the results publicly. Consequently, in order to reach a reasonable cost-benefit balance, the requirements allow the undertaking to provide the information qualitatively if it is unable to provide it quantitatively.

BC189. Future enhancement of the ESRS may rely on standardised methodologies and more specifically on a potential classification of significant harmful activities, as described in the Public Consultation Report on Taxonomy extension options linked to environmental objectives15. The proposed framework of a potential EU Taxonomy extension could be a building block for standardised risk quantification through common definitions and science-based technical criteria. Another possibility would be to explore how the indicators relevant to the 'do no significant harm-DNSH' criteria of current EU Taxonomy regulation could be made coherent with other indicators within the overall sustainable finance framework for improved usability in assessing the potential financial effects of climate-related risks.

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

BC190. The objective of Disclosure Requirement E1-15 is to provide an understanding of how material climate-related physical risks may affect the undertaking's financial position (owned assets) and performance (potential future increase/decrease in net turnover and costs due to business interruptions, increased supply prices, etc. resulting in potential margin erosions) over the short, medium and long term considering that these potential future financial effects may not meet the financial reporting recognition and measurement criteria set for assets and liabilities at the reporting date.

BC191. Several methodologies and tools are already developed and used on the market worldwide. The approach is usually based on two steps: physical risks exposure (disclosed under "Climate-related specific application guidance on ESRS 2 Disclosure Requirements IRO 1 and IRO 2 on materiality assessment") and financial impact assessment (disclosed under Disclosure Requirement E1-15). The most advanced methodologies recommend modelling IPCC scenarios with the geographical location of assets and supply chain and customers' countries on various time horizons. Thus, the use of models allows the undertaking to first identify the climate-related hazards such as heat and cold waves, number of frost days per year, heavy precipitations, wind intensity change, etc. and then the owned assets that are subject to these climate-related hazards and the business activities exposed to physical risks along the value chain.

BC192. Paragraph AG 71 supports the need for understandability, verifiability, and comparability despite the lack of mature methodology for assessing the quantitative potential financial effects by providing transparency on the scope, time horizon, calculation methodology, critical assumptions, and limitations of the undertaking's assessment.

BC193. Considering the level of uncertainty regarding both physical risks and the related financial effects on a specific undertaking, paragraphs 67, AG 72 (a) and AG 74 allow the undertaking to disclose the potential financial effects as a range or as qualitative information.

[15] Platform on Sustainable Finance, "Public Consultation Report on Taxonomy extension options linked to environmental objectives", July 2021. Available here.

BC194. Paragraphs 67 (a) and AG 72 (b) are provided on the basis that potential financial effects from material climate-related physical risks also depend on the undertaking's planned responses to manage its risks (i.e., accept, avoid, reduce or share/transfer). Without trying to assess the efficiency of the actual and planned mitigation actions, these paragraphs aim at highlighting the relevance and coverage of the actions. Moreover, these paragraphs aim to increase the consistency and reliability of the undertaking's disclosure by requiring that the potential financial effects disclosed under Disclosure Requirement E1-15 shall reflect and be read in parallel with the action plans to adapt to physical risks and resources dedicated to adaptation solutions disclosed under Disclosure Requirement E1-4 (Climate change mitigation and adaptation action plans and resources).

BC195. Paragraphs 68 and AG 75 to AG 78 aim to strengthen the consistency of sustainability-related financial disclosure requirements with financial reporting.

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

BC196. The objective of Disclosure Requirement E1-16 is to provide an understanding of how material climate-related transition risks may affect the undertaking's financial performance and position over the short-, medium- and long-term, considering that those potential future financial effects may not meet the financial reporting recognition and measurement requirements for inclusion in the financial statements at the reporting date.

BC197. Currently, no commonly agreed methodology exists to assess or measure how climate-related transition risks may affect the future financial position and performance of the undertaking. It is recognised that methodologies are highly dependent on the business model of the undertaking itself, on carbon pricing policies and mechanisms, on a common definition of assets at risk, and a common definition of significantly harmful activities.

BC198. It is quite clear from the perspective of the EBA (European Banking Authority) and NGFS (Network of Central Banks and Supervisors for Greening the Financial System) that the methodologies used by financial institutions to assess transition risks stemming from climate factors still need to be improved. Thus, at this stage, financial institutions can only rely on qualitative assessments of the risk management process of their counterparties/investees as well as on quantitative metrics used by their counterparties/investees to manage and monitor their climate-related risks and opportunities. Therefore, the disclosures required by paragraphs 69 and 71 remain largely based on the exercise of judgement.

BC199. Paragraph AG 80 supports the need for understandability, verifiability, and comparability of the quantitative potential financial effects despite the lack of mature methodology by providing transparency on the scope, time horizon, calculation methodology, critical assumptions, and limitations of the undertaking's assessment.

BC200. Paragraph 81 (a) builds on the NGFS16, which underlines the predominant role of stranded assets in transmitting the transition financial impact from corporates to financial institutions. The disclosure of value and share of stranded assets is considered by the EBA as the starting point of the valuation of exposure of assets impacted by transition risks. The estimation of stranded assets should be addressed in a forward-looking perspective with the following disclosure on scope and methodology according to the IEA:

(a) scope: physical assets whose costs cannot be recovered with important stranding risks in the long-lived power generation plants,

(b) methodology and especially the period considered over which foregone revenues are taken into account (this period must be longer than usual period considered in accounting standard for assets depletion);

(c) key assumptions: future prices, underlying scientific scenario, policy framework facilitating the transition, etc.; and

(d) value: book value.

This Disclosure Requirement of potentially stranded assets builds on the concept of locked-in GHG emissions developed under paragraph 15 (d) of Disclosure Requirement E1-1. Significance of locked-in GHG emissions associated with specific assets should help identify the ones that might become stranded in the future in case they are incompatible with a transition to a climate-neutral economy.

BC201. Paragraph AG 82 acknowledges that public policies aiming to apply the polluter-pays-principle, by shifting the costs induced by GHG emissions from society to the emitters of greenhouse gases are a main driver of climate-related transition risks. Carbon pricing policies primarily manifest in two ways: the emissions trading scheme and the carbon tax. The World Bank indicates that carbon pricing policies currently exist in 42 countries at the national level and 25 areas at the subnational level – numbers that have almost doubled since 2012. The EU ETS is considered a primary policy underpinning the EU's goal of reducing emissions by at least 55% by 2030.

BC202. Paragraph AG 82 (d) introduces the concept of monetised GHG emissions, which allows users to understand the potential extent of financial effects associated with the undertaking's direct and indirect GHG emissions. It builds on recital 38 of the [Draft] CSRD, which states that "some natural capital accounting methodologies seek to assign a monetary value to the environmental impacts of companies' activities, which may help users to better understand those impacts", consequently "it is therefore appropriate that sustainability reporting standards should be able to include monetised indicators of sustainability impacts if that is deemed necessary". Moreover, it is aligned with the WEF paper on stakeholder capitalism, which includes the "valued impact of GHG emissions" and "estimated societal cost of carbon" as expanded metrics.

BC203. This paragraph acknowledges that policymakers can base their climate policies on carbon prices and other instruments, where the GHG emission reductions to be achieved through carbon pricing determine the price level, ranging from partial to complete internalisation of the costs induced by emitters. Thus, using different cost rates in the monetisation of GHG emissions – i.e., low, middle, high – enables to reflect different policy options and resulting transition risks arising from carbon prices.

[16] NGFS, "Overview of Environmental Risk Analysis by Financial Institutions", 2020. Available here.

BC204. In order to reach a faithful and comparable monetisation of GHG emissions, the range of carbon prices should be predefined and uniformly applied by all the undertakings. However, given that these cost rates are not yet readily available and would need to be determined at the EU level, this disclosure is introduced on an optional basis until the future enhancement of the ESRS.

BC205. Paragraphs 72 and AG 86 to AG 90 aim to strengthen the consistency of sustainability-related financial disclosure requirements with financial reporting.

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

BC206. The objective of Disclosure Requirement E1-17 is to allow users to understand how the undertaking may financially benefit from material climate-related opportunities. The disclosure is complementary to the information requested under the Taxonomy Regulation.

BC207. The Disclosure Requirement E1-17 builds on the [Draft] IFRS S2 and TCFD recommendations, which propose the disclosure of the amount and percentage of assets or business activities aligned with climate-related opportunities.

BC208. The disclosure is structured according to two categories of climate-related opportunities – (i) expected cost savings with regards to climate change mitigation and adaptation actions; and (ii) potential market size – in order to support the provision of granular, accurate and comparable information.

BC209. Paragraph 75 (a) should be read in conjunction with the information disclosed under the provisions of the Taxonomy Regulation. It should help users put into perspective the green turnover ratio of the current Taxonomy Regulation in comparison with the potential of the market for low-carbon or adaptation products and services.

BC210. The definition of low-carbon products and services is expected to be specified in the future enhancement of the ESRS. One option would be to define them according to their contribution to life-cycle GHG emissions savings in comparison with alternative products (see Optional Disclosure Requirement E1-14) and to disclose the planned revenues from products and services associated with these avoided emissions. Another possibility would be to define criteria for green products and services and to monitor the development of these portfolios.

Annex 1: Proof of Concept – XBRL Taxonomy

Purpose of the PoC XBRL Taxonomy

The [draft] CSRD requires undertakings to publish sustainability reports and it also envisages that these are to be digitally tagged for sustainability information. The digital tagging is similar to the European Single Electronic Format (ESEF) which is regulated by the Delegated Regulation (EU) 2018/815[17]. In order to meet such requirement, a digital XBRL taxonomy[18] is to be created for the European Sustainability Reporting Standards (ESRS). This digitally XBRL taxonomy is to reflect each ESRS disclosure requirement and ensure, from a technical standpoint, that unique identifiers are created and the machine-readability of the corresponding data points

This accompanying appendix to the Basis for Conclusions of [draft] ESRS E1 has been prepared on the basis of a selection of disclosure requirements with the objective of publishing the first draft of an XBRL taxonomy, also called Proof of concept ("PoC XBRL Taxonomy"). Such proof of concept has been published with the ambition to:

(a) Test out a full end-to-end process of standard setting which includes defining and creating a single digital XBRL taxonomy for each ESRS individually and as a sustainability reporting framework as a whole;
(b) Provide a prototype to reporting entities, software vendors, and supervisory authorities that helps to explain the technology and prepare for the digital tagging of ESRS reporting requirement. In addition, this PoC XBRL Taxonomy could support subsequent field tests.
(c) Estimate the time and resources to develop a full XBRL taxonomy for the ESRS; and
(d) Receive feedback from international digital reporting experts to aid in aligning with international best-practices, and to ensure compatibility with existing European reporting requirements (e.g. ESEF).

The PoC XBRL Taxonomy is not intended to be used in a live production environment given that the [draft] ESRS are not final Standards and, as result of the public consultation, these may change. Within this context, this is to be considered as a working draft with limitations and a number of known issues described below.

Human readable presentation of the XBRL taxonomy

While the XBRL taxonomy itself is a set of technical files and can only be used and browsed with an XBRL software, it is possible visualise it in a human readable tabular form.

[17] https://www.esma.europa.eu/policy-activities/corporate-disclosure/european-single-electronic-format

[18] https://www.xbrl.org/the-standard/what/taxonomies/
https://www.xbrl.org/guidance/xbrl-glossary/

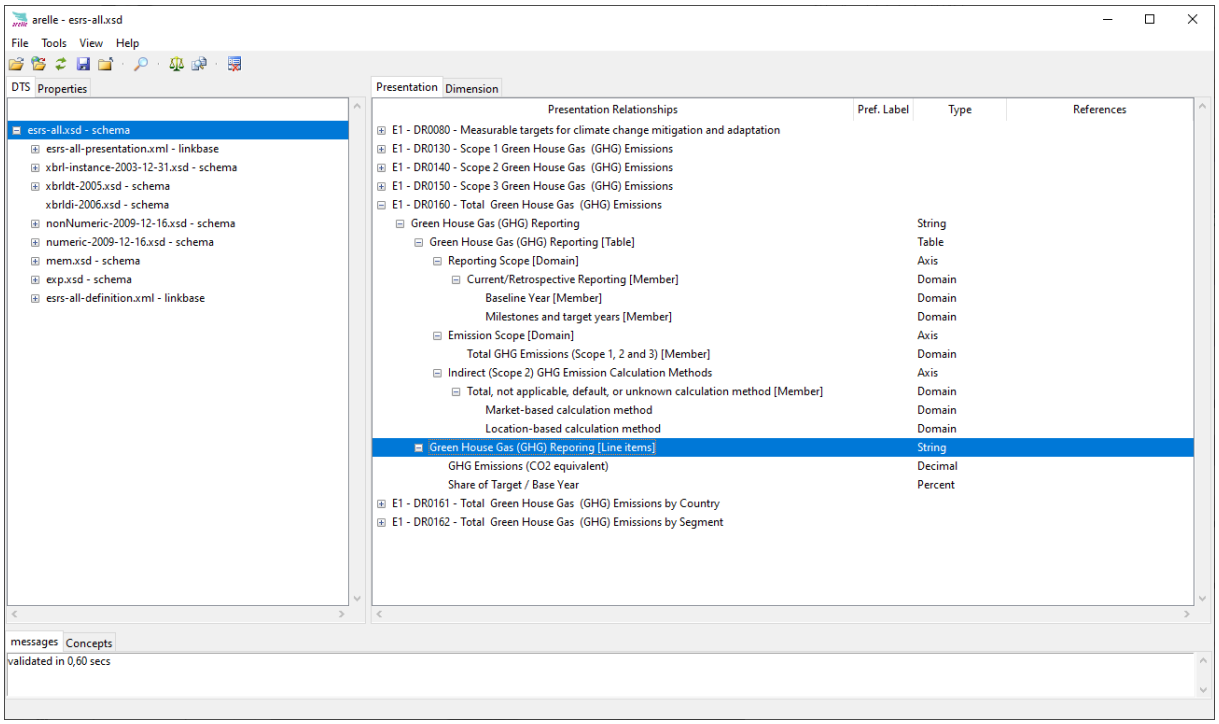

Figure 1 Screenshot showing the ESRS PoC XBRL Taxonomy in the free XBRL Taxonomy viewer Arelle[19].

Technical detail

The PoC XBRL Taxonomy release consists of the technical taxonomy files in the form of a Taxonomy Package: *EFRAG-ESRS-2022-PoC-Taxonomy.zip*

The PoC XBRL taxonomy is built on the following XBRL specifications:

(a) XBRL 2.1: https://www.xbrl.org/Specification/XBRL-2.1/REC-2003-12-31/XBRL-2.1-REC-2003-12-31+corrected-errata-2013-02-20.html

(b) Dimensions 1.0: https://www.xbrl.org/specification/dimensions/rec-2012-01-25/dimensions-rec-2006-09-18+corrected-errata-2012-01-25-clean.html

(c) Taxonomy Packages 1.0: https://specifications.xbrl.org/work-product-index-taxonomy-packages-taxonomy-packages-1.0.html

The recommendation to analyse the PoC XBRL Taxonomy is to use a software tool that implements the aforementioned specifications.

The following entry points may be leveraged to load the taxonomy. Notwithstanding, the final taxonomy production files are not yet available on the EFRAG website, the recommendation is to use local caching functionality for that purpose. Details of the entry points below:

(a) ESRS – entry point with Presentation and Definition Linkbases, that are useful for tagging purposes. http://efrag.org/xbrl/esrs/2022/esrs-all.xsd

[19] https://arelle.org/arelle/

(b) ESRS Core – entry point with the element declarations and labels, references, that are used for taxonomy extension scenarios.
http://efrag.org/xbrl/esrs/2022/esrs-cor.xsd

Assumptions, limitations and known issues

The PoC XBRL taxonomy is a draft or BETA version that includes the following limitations and known issues:

(a) The naming of the elements, namespaces, prefixes, and human readable labels is neither final nor proof-read.
(b) The Unit Type Registry is not yet in use. For elements like *ESRS: Ghg Emissions* specific types will be used, rather than simple decimals.
(c) The use of the element's attributes *balance* (debit/credit) as well as the *period type* (instant/duration) is not yet finally decided.
(d) The PoC XBRL taxonomy includes a Presentation and Definition Linkbase only. The final version may introduce a Calculation Linkbase, or validation rules based on the Formula Linkbase 1.0.
(e) There is no plan to create a Table Linkbase for the ESRS XBRL taxonomy, because of its main use case of reporting in Inline XBRL.
(f) The decision on taxonomy extensions for entity specific disclosures allowed or mandated is under consideration, the current PoC taxonomy is a closed taxonomy. However, the general technical architecture would allow taxonomy extensions.
(g) Best practices are not yet fully considered but will be evaluated when the final taxonomy is released. A key priority is to consider the compatibility with the ESMA ESEF XBRL Taxonomy Architecture and other XBRL best practices.
(h) Illustrative examples are not included in this PoC XBRL Taxonomy. The ambition is to publish these in the forthcoming months.

EFRAG is co-funded by the European Union and EEA and EFTA countries. The contents of the documents are however the sole responsibility of the EFRAG PTF- ESRS and do not necessarily reflect those of the European Union or the Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG FISMA). Neither the European Union nor DG FISMA can be held responsible for them.