EFRAG
sustainability reporting

DRAFT

ESRS E1

CLIMATE CHANGE

NOVEMBER 2025

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Objective

1. The ***sustainability statement*** shall include information in relation to ESRS E1 *Climate Change* if this ***topic*** relates to material ***impacts, risks*** and ***opportunities*** to cover all the reporting areas listed in paragraph 5 of ESRS 1 *General Requirements*. If not all the sub-topics prescribed by this Standard are to be reported following the ***materiality*** assessment, paragraph 30 of ESRS 1 *General Requirements* applies.
2. The objective of this Standard is to set out Disclosure Requirements (DRs) providing information in relation to the reporting areas referred above that implement and complement the cross-cutting provisions of ESRS 1 *General Requirements* and ESRS 2 *General Disclosures.*
3. In this Standard, each DR is introduced by a disclosure objective except for ***policies***, ***actions*** and ***targets***, for which the provisions in ESRS 2 GDR-P, GDR-A and GDR-T provide the necessary framing for the relevant DRs.
4. This Standard takes into account the EU regulatory frameworks and other relevant frameworks, including the EU Climate Law (Regulation (EU) 2021/1119), the Climate Benchmark Standards Regulation (Regulation (EU) 2020/1818), the Sustainable Finance Disclosure Regulation (SFDR) (Regulation (EU) 2019/2088), the EU Taxonomy Regulation (Regulation (EU) 2020/852) and so-called 'Pillar 3' disclosures under the Capital Requirements Regulation (Regulation (EU) 2022/2453).
5. This Standard sets out DRs related to climate change, particularly with respect to the following sub-topics: ***climate change mitigation***, ***climate change adaptation*** and energy.
6. ***Climate change mitigation*** relates to the undertaking's efforts to limit the increase in the global average temperature to 1.5°C above pre-industrial levels in line with the Paris Agreement and the objectives of the European Climate Law (Regulation (EU) 2021/1119). This Standard covers DRs related to how the undertaking addresses its ***GHG emissions*** as well as the associated ***transition risks***.
7. ***Climate change adaptation*** relates to the undertaking's process of adjustment to actual and expected consequences of climate change. This Standard covers DRs related to climate-related hazards that may lead to physical climate ***risks*** for the undertaking and its adaptation solutions for reducing these risks. It also covers ***transition risks*** stemming from the need to adapt to climate-related hazards.
8. The DRs related to energy cover all types of energy production and consumption.

Interaction with other ESRS

9. Social and environmental ***topics*** interact with each other. The main points of interaction between ESRS E1 *Climate Change* and the other topical standards are the following:
   (a) ESRS E1 *Climate Change* covers, but is not limited to, the seven GHGs: CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 and NF_3. ESRS E2 *Pollution* addresses ozone-depleting substances (ODS), nitrogen oxides (NO_x) and sulphur oxides (SO_x), among other air emissions, that are connected to climate change;
   (b) ***climate change mitigation*** and ***climate change adaptation*** are related to ***topics*** addressed in particular in ESRS E3 *Water* and ESRS E4 *Biodiversity and Ecosystems*. ESRS E1 *Climate Change* addresses, among other things, acute and chronic physical risks arising from the water and ocean-related hazards. ESRS E1 *Climate Change* also addresses ***GHG emissions*** from the use of natural resources, land-use and ***land-use change*** as well as removals of GHG from the atmosphere, for example through ***nature-based solutions***. ***Biodiversity loss*** and ecosystem degradation caused or accelerated by climate change are addressed in ESRS E4 *Biodiversity and Ecosystems*;
   (c) ***Impacts*** on people that may arise from the transition to a climate-neutral economy are covered under ESRS S1 *Own Workforce*, ESRS S2 *Workers in the Value Chain*, ESRS S3 *Affected Communities* and ESRS S4 *Consumers and End-users.*

Disclosure Requirements

Strategy

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

10. (15 amended) The objective of this DR is to enable an understanding of the undertaking's past, current and future mitigation efforts to ensure that its strategy and ***business model*** are compatible with the transition to a sustainable economy and with limiting global warming to 1.5°C in line with the Paris Agreement and the objectives of the European Climate Law (Regulation (EU) 2021/1119), including achieving climate neutrality by 2050.

11. (16 amended) The information about the ***transition plan for climate change mitigation*** shall include:

    (a) a description of its key features. This includes ***GHG emission reduction targets***, the ***decarbonisation levers***, key ***actions***, investments and funding needed to support the implementation of the plan, the approval of the plan by the ***administrative, management and supervisory bodies***, and how the plan is embedded in and aligned with the undertaking's overall business strategy. It shall also include information on how the undertaking's strategy and ***business model*** are or will be compatible, pursuant to the implementation of the plan, with the limiting of global warming to 1.5°C in line with the Paris Agreement and with the EU's objective of achieving climate neutrality by 2050;

    (b) CapEx amounts invested during the reporting period related to coal, oil and gas economic activities[1] if the undertaking has them;

    (c) information about key assumptions used and dependencies on which the plan relies;

    (d) a qualitative assessment and explanation of how potential ***locked-in GHG emissions*** from key physical assets and products may jeopardise the achievement of the plan and drive ***transition risk***; and

    (e) an explanation of the undertaking's progress in implementing the transition plan.

12. (17 amended) If the undertaking does not have in place a ***transition plan for climate change mitigation*** which includes the key features listed in paragraph 11(a), it shall disclose this fact and indicate whether and, if so, when it expects to adopt one.

APPLICATION REQUIREMENTS

AR 1 for para. 11 **(Transition plan for climate change mitigation)**	(AR 1 amended) A ***transition plan for climate change mitigation*** sets out how the undertaking intends to transform its strategy and ***business model*** to ensure compatibility with the transition to a sustainable economy, and it includes the key features listed out in paragraph 11. The undertaking's transition plan for climate change mitigation can be either stand-alone or included in a broader ***transition plan*** covering both mitigation and adaptation aspects. If the undertaking's transition plan also covers adaptation, the disclosure shall specify this fact and cross-reference the information provided in accordance with ESRS E1-3 and E1-5.
AR 2 for para. 11(a) **(Key features description)**	(New) In disclosing the key features referred to in paragraph 11(a), the undertaking shall refer, if applicable, to disclosures on ***policies***, ***actions***, ***resources*** and ***targets*** made elsewhere (e.g. ESRS E1-5 and E1-6 as well as ESRS 2 *General Disclosures*). The transition plan disclosure consolidates the

[1] The CapEx amounts considered are related to the following NACE codes: (a) B.05 Mining of coal and lignite, B.06 Extraction of crude petroleum and natural gas (limited to crude petroleum), B.09.1 Support activities for petroleum and natural gas extraction (limited to crude petroleum), (b) C.19 Manufacture of coke and refined petroleum products, (c) D.35.1 - Electric power generation, transmission and distribution, (d) D.35.3 - Steam and air conditioning supply (limited to coal-fired and oil-fired power or heat generation), (e) D.46.81 - Wholesale of solid, liquid and gaseous fuels and related products (limited to solid and liquid fuels).

	key features of the undertaking's plan into a coherent description that demonstrates that they are strategically aligned to drive business transformation. The relevant disclosures under this paragraph are: (a) (AR 2 amended) a statement on whether the ***GHG emission reduction targets*** are science-based and compatible with limiting global warming to 1.5°C (with reference to ESRS E1-6, paragraph 23, and the associated Application Requirements (ARs)); (b) (16(b) amended) ***decarbonisation levers*** identified (with reference to ESRS E1-5), including changes in the undertaking's product and service portfolio and the adoption of new technologies in its own operations, upstream or downstream value chain; (c) (16(c) amended) the amount of significant financial resources (operational or capital expenditure), allocated or expected to be allocated for the implementation of its ***transition plan for climate change mitigation***, including an indicative range of future financial resources expected (with reference to ESRS E1-5 and ESRS 2 GDR-A). This disclosure can be limited to (a) the approved and announced key actions and action plans and (b) the planned funding sources for implementing those actions (ESRS 2 AR 41). (New) The disclosure required by paragraph 11(a) focuses on providing the key elements necessary for demonstrating the coherence and credibility of the undertaking's transition plan for climate change mitigation. The undertaking is not required to disclose detailed internal information used to manage the undertaking's transition plan for climate change mitigation beyond the scope of this disclosure.
AR 3 for para. 11(c) **(Key assumptions and dependencies)**	(New) Information on dependencies relate to, for instance, deployment of certain technologies, workforce availability or ability to implement changes in the ***value chain***. If applicable, the undertaking shall include information in line with ESRS 2 GDR-A regarding dependencies of future financial ***resources*** and other resources and how these may constrain the ***actions*** of the ***transition plan for climate change mitigation***. Information on assumptions relate to, e.g., expectations about regulatory requirements or the ability of an entity to implement planned changes within its value chain.
AR 4 for para. 11(d) **(Locked-in emission assessment)**	(AR 3 amended) The qualitative assessment of ***locked-in emissions*** seeks to ensure that these emissions are adequately considered by the undertaking in its ***transition plan for climate change mitigation***, explaining how the magnitude of the locked-in emissions can potentially put at risk – or not – the eventual implementation of the transition plan.
AR 5 for para. 11(e) **(Progress explanation)**	(New) When explaining its progress in implementing the ***transition plan for climate change mitigation***, the undertaking shall explain quantitative and qualitative components such as the deployment of ***resources***, the ***actions*** taken and the ***GHG emission reductions*** achieved or expected to be achieved. Information on progress shall include, where applicable, sector-specific ***metrics*** that can be used to track progress against specific climate ***targets*** that the undertaking may have set, using recognised sectoral decarbonisation standards.

Disclosure Requirement E1-2 – *Identification of climate-related risks and scenario analysis*

13. (New) The objective of this DR is to enable an understanding of how the undertaking identifies and assesses ***climate-related risks*** and ***opportunities*** for financial ***materiality***.

14. (18 amended) The undertaking shall explain for each material climate-related ***risk*** identified (per ESRS 2 IRO-2, paragraph 37) whether it classifies the risk as a ***climate-related physical risk*** or a ***climate-related transition risk***.

15. (20 amended) In addition to the disclosure provided in accordance with ESRS 2 IRO-1, the undertaking shall disclose key elements of the methodology used to assess how its assets and business activities in own operations and its upstream and downstream value chain may be exposed and be sensitive over the short, medium and long term to:

    (a) climate-related hazards; and

    (b) climate-related transition events and trends.

16. (21 amended) If climate-related ***scenario analysis*** is used, the undertaking shall disclose: (a) the ranges of scenarios applied, including (i) whether for physical climate ***risks*** at least one high-emission scenario was used, and (ii) whether for climate transition risks at least one scenario in line with limiting global warming to 1.5°C with no or limited overshooting was used, and (iii) the associated global average temperature projection of the scenarios and why they are considered relevant; (b) the scope of operations used (e.g. operating locations, business units); (c) the key assumptions made (e.g. policies, macroeconomic trends, national or regional variables, energy use and mix, technology developments); (d) the time period when it was carried out.

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AR 6 for para. 15 **(Key elements of the methodology)**	(AR 11 and AR 12 amended) In conducting its climate-related ***risk*** analysis, the undertaking shall: (a) identify climate-related hazards (for climate-related physical risks) or transition events (for climate-related transition risks) over the short, medium and long term and screen its assets and business activities to assess whether they are exposed to them; and (b) assess the extent to which its assets and business activities are exposed and are sensitive to the identified climate-related hazards or transition events, taking into consideration the likelihood, magnitude and duration of them, as well as the locations of its assets and business dependencies in its value-chain (for climate-related hazards).

Disclosure Requirement E1-3 – *Resilience in relation to climate change*

17. The objective of this DR is to enable an understanding of the extent to which the undertaking's strategy and ***business model*** are prepared for, and can adapt to, material climate-related ***risks.***

18. (19 amended) In addition to the disclosure in ESRS 2 SBM-3, the undertaking shall disclose the following information on the resilience of its strategy and ***business model*** to climate-related ***risks***:

    (a) the results of its analysis of ***climate resilience*** in relation to climate-related risks. The undertaking shall explain: (i) the implications of the assessment, if any, on its strategy and business model; (ii) how the effects identified through the climate-related ***scenario analysis***, if used, inform the undertaking's potential response to climate-related risks; (iii) how its ***transition plan***, if existent, and its current and planned mitigation and adaptation ***actions*** (ESRS E1-5) contribute to its resilience to climate-related risks;

    (b) significant areas of uncertainty in the assessment of its ***climate resilience***; and

    (c) its capacity to adjust or adapt its strategy and business model to climate change over the short, medium and long term.

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AR 7 for para. 18	The analysis of ***climate resilience*** builds upon the identification of climate-related ***risks*** reported in ESRS E1-2, paragraph 15. Therefore, the scope of the analysis of ***climate*** resilience is aligned with that of the undertaking's material climate-related risks and informed by climate-related scenario analysis if performed. If climate-related scenario analysis is used specifically for the purpose of assessing climate resilience, the undertaking shall disclose the information prescribed under paragraph 16 and 18.
AR 8 for para. 18 **(Resilience of strategy)**	When assessing the ***climate resilience*** of its strategy and business model, the undertaking shall consider the implications for its strategy and ***business model*** of the assessments performed in accordance with ESRS E1-2 and of the exposures at ***risk*** disclosed in accordance with ESRS E1-11 (***anticipated financial effects***), including ***actions*** required to respond to the climate-related risks and ***opportunities*** identified through climate-related ***scenario analysis*** if performed.
AR 9 for para. 18(a) **(Resilience of strategy)**	(AR 8 amended) When disclosing the results and implications of its analysis of ***climate resilience*** in accordance with paragraph 18(a), the undertaking shall provide its assessment of its ***climate resilience*** as at the reporting date. An undertaking is not required to perform an analysis of climate resilience on an annual basis. If the undertaking has updated its assessment of climate-related ***impacts***, ***risks*** and ***opportunities*** (per ESRS E1-2), it shall update its analysis of resilience. When disclosing under paragraph 18, financial institutions may leverage on the applicable prudential regulatory framework if it includes references to resilience analysis or to related concepts such as usage of scenarios in the context of sustainability risk plans.
AR 10 for para. 18(c) **(Resilience of strategy)**	(AR 8 amended) When disclosing on its capacity to adjust its strategy and ***business model*** in accordance with paragraph 18(c), the undertaking shall consider: (a) the availability of, and flexibility in, existing financial ***resources*** to manage financial effects of climate-related ***risks*** and to capitalise on ***climate-related opportunities***; (b) its ability to redeploy, ***repurpose***, upgrade or decommission existing assets in response to climate-related changes; (c) the effect of current and planned investments in ***climate change mitigation***, adaptation and transition ***opportunities*** for ***climate resilience***; (d) cross-referencing to its ***climate change mitigation*** and ***climate change adaptation actions***, disclosed in ESRS E1-5.

Impact, risk and opportunity management

Disclosure Requirement E1-4 – *Policies related to climate change mitigation and adaptation*

19. (24 amended) The undertaking shall disclose its ***climate change mitigation*** and ***climate change adaptation policies*** in accordance with the provisions of ESRS 2 GDR-P.

Disclosure Requirement E1-5 – *Actions and resources in relation to climate change mitigation and adaptation*

20. (28 amended) The undertaking shall disclose its key ***climate change mitigation*** and the ***climate change adaptation actions*** and resources allocated to their implementation, in accordance with the provisions of ESRS 2 GDR-A.

21. (29 amended) In addition to ESRS 2 GDR-A, when disclosing current and planned ***actions***, the undertaking shall:
    (a) present its key ***climate change mitigation*** actions by ***decarbonisation lever***; and
    (b) disclose the achieved and expected ***GHG emission reduction*** by ***decarbonisation lever***.

Metrics and targets

Disclosure Requirement E1-6 – *Targets related to climate change*

22. (32 amended) The undertaking shall disclose its ***climate change targets*** in accordance with the provisions of ESRS 2 GDR-T.

23. (34 amended) The undertaking shall disclose the ***GHG emission reduction targets*** it has set, including:
    (a) absolute GHG emission reduction targets for scopes 1, 2 and 3, either separately or combined, and where relevant, in intensity value. The undertaking shall specify, in case of combined GHG emission reduction targets, which ***GHG emission*** scopes (1, 2 and/or 3) are covered by the target and the share related to each respective GHG emission scope;
    (b) (AR 24 amended) if the scope (geography, GHGs covered, entities included) of the GHG emission reduction target diverges from the scope of the GHG inventory (reported under ESRS E1-8), the percentages for scopes 1, 2 and 3 covered by the target, as well as which GHGs are covered; and
    (c) a statement on whether the GHG emission reduction targets are science-based and compatible with limiting global warming to 1.5°C. The undertaking shall state which framework and methodology has been used to determine these targets, including whether they are derived using a sectoral decarbonisation pathway, and the underlying climate and policy scenarios. As part of the critical assumptions used for setting GHG emission reduction targets, the undertaking shall briefly explain how it has considered future developments (e.g. changes in sales volumes, shifts in customer preferences and demand, regulatory factors, and new technologies) and how these will potentially impact both its GHG emissions and emissions reductions.

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AR 11 for para. 22 **(Climate change targets)**	(60 amended) If the undertaking discloses a ***net-zero target*** separately to any ***GHG emission reduction targets*** it has set, as per ESRS 2 GDR-T, it shall explain how it intends to permanently neutralise any residual GHG emissions.
AR 12 for para. 23 **(GHG emissions reduction targets)**	(AR 34(b) amended) The ***GHG emission reduction targets*** shall be gross targets, meaning that the undertaking shall not include GHG removals, ***carbon credits*** or avoided emissions as means of achieving the GHG emission reduction targets. In accordance with GDR-T, the undertaking shall provide information about the scope and methodologies used to define the target, including the method used to calculate ***scope 2 GHG emissions*** (i.e. either the location-based or market-based method).
AR 13 for para. 23	(AR 23 amended) If the undertaking discloses intensity ***targets***, they shall be formulated as ratios of ***GHG emissions*** relative to a unit of physical activity or economic

(GHG emissions reduction targets)

output. In cases where the undertaking has only set a GHG intensity reduction target, it shall disclose the associated absolute values for the target year and interim target year(s) – except for financial institutions scope 3, category 15 emissions, as explained below. This may result in a situation where the undertaking is required to disclose an increase of absolute GHG emissions for the target year and interim target year(s), e.g. because it anticipates the organic growth of its business.

Financial institutions are exempted from disclosing absolute values for their scope 3, category 15 emission intensity targets, provided they:

(a) use physical or financial measures as denominators for intensity targets and consistently disclose absolute financed emissions for those targets (such as targets for material high-impact sectors); and

(b) provide contextual information (as per GDR-M) for the targets that have been set, describing the key factors influencing expected changes in absolute financed emissions over time and how they relate with the observed trends in the past 3 to 5 years.

AR 14 for para. 23

(GHG emissions reduction targets)

(AR 25(b), AR 25(c) amended) When applying GDR-T:

(a) the baseline value and base year are not to be changed unless key changes occur in either the ***target*** or reporting boundary; and

(b) the undertaking shall select a recent and representative base year. The base year chosen by the undertaking may be either the currently applied base year for existing targets or the first year of application of the sustainability reporting requirements.

AR 15 for para. 23

(Presentation of targets and actions)

(AR 31 amended) The undertaking may present its ***GHG emission reduction targets*** together with its ***climate change mitigation actions*** (see paragraph 21) showing the ***decarbonisation levers*** and their quantitative contributions to achieve the GHG emission reduction targets as a table (see, e.g., Figure 1) or graphic over time (see, e.g., Figure 2).

	Base year (e.g., 2025)	2030 target	2035 target	…	Up to 2050 target
GHG emissions (ktCO2eq)	100	60	40		
Energy efficiency and consumption reduction	-	-10	-4		
Material efficiency and consumption reduction	-	-5	-		
Fuel switching	-	-2	-		
Electrification	-	-	-10		
Use of renewable energy	-	-10	-3		
Phase out, substitution or modification of product	-	-8	-		
Phase out, substitution or modification of process	-	-5	-3		
Other	-	-			

Figure 1: ESRS E1 *Climate Change* – Table 1

<table>
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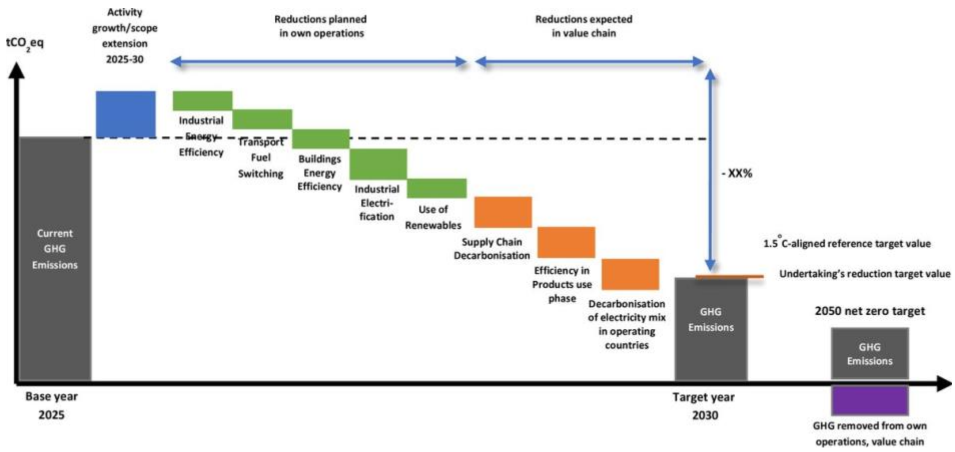

Figure 2: ESRS E1 *Climate Change* – Graphic 1
</td></tr>
<tr><td>AR 16 for para. 23

(GHG emissions reduction targets)</td><td>(New) If the undertaking reports under ESRS E1-8 using an operational control boundary, it may report scope 1 and scope 2 GHG emission reduction targets referring to this organisational boundary.</td></tr>
<tr><td>AR 17 for para. 23(c)

(GHG emissions reduction targets compatible with 1.5°C)</td><td>(AR 26 amended) When disclosing the information required under paragraph 23(c), the undertaking shall compare its target value(s) with a sector-specific (if available) or a cross-sector emission pathway compatible with limiting global warming to 1.5°C. For this purpose, the undertaking shall calculate a 1.5°C-aligned reference target value for scope 1 and 2 (and a separate one for scope 3 if it has scope 3 GHG emissions reduction targets) against which its own GHG emission reduction targets or interim targets in the respective scopes can be compared.

The explanation of how the targets are compatible is done by benchmarking the target value against the reference target value. Validation through an independent third party, including information on the third party, the methodology/standard applied and the trajectory used can be valuable inputs to be considered in this explanation.</td></tr>
</table>

Disclosure Requirement E1-7 – *Energy consumption and mix*

24. (36 amended) The objective of this DR is to provide an understanding of the undertaking's energy consumption and mix.

25. (37 amended) The undertaking shall disclose its total energy consumption in megawatt hours (MWh) related to its own operations, disaggregated by:

    (a) total energy consumption from fossil sources[2];

    (b) total energy consumption from nuclear sources; and

    (c) total energy consumption from renewable sources.

[2] This information supports the information needs of financial market participants subject to Regulation (EU) 2019/2088 because it is derived from a mandatory indicator related to principal adverse impacts, as set out by Indicator #5 in Table I of Annex I of Commission Delegated Regulation (EU) 2022/1288 with regard to disclosure rules on sustainable investments ('Share of non- renewable energy consumption and production'). The breakdown serves as a reference for an additional indicator related to principal adverse impacts as set out by Indicator #5 in Table II of the same Annex ('Breakdown of energy consumption by type of non-renewable sources of energy').

26. (38 amended) The undertaking with operations in ***high climate impact sectors*** shall further disaggregate its total energy consumption from fossil sources by:

    (a) fuel consumption from coal and coal products;

    (b) fuel consumption from crude oil and petroleum products;

    (c) fuel consumption from natural gas;

    (d) fuel consumption from other fossil sources; and

    (e) consumption of ***purchased or acquired electricity, heat, steam, or cooling*** from fossil sources.

27. (39 amended) If the undertaking produces energy, it shall also disaggregate and disclose separately its ***non-renewable energy*** production and ***renewable energy*** production in MWh[3].

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AR 18 for para. 25 **(Energy consumption and mix)**	(AR 32 amended) When preparing the information on energy consumption required under paragraph 25, the undertaking shall adopt the following calculation approaches: (a) (AR 32(b) amended) exclude feedstocks and fuels that are not combusted for energy purposes (e.g. natural gas to produce polymers). The undertaking that consumes fuel as feedstocks can disclose information on this consumption separately from the required disclosures; (b) (AR 32(c) amended) use MWh in Lower Heating Value or net calorific value for all quantitative combustion-related information; (c) (AR 32(d) amended) base all quantitative energy-related information on final energy consumption, therefore referring to the amount of energy the undertaking actually consumes; (d) (AR 32(e) amended) avoid double counting fuel consumption when disclosing self-generated energy consumption**.** If the undertaking generates electricity from either a non-renewable or renewable fuel source and then consumes the generated electricity, the energy consumption shall be accounted only once under fuel consumption; (e) (AR 32(f) amended) not offset energy consumption even if onsite generated energy is sold to and used by a third party; (f) (AR 32(g) amended) not count energy that is sourced from within the organisational boundary under 'purchased or acquired' energy; (g) (AR 32(h) amended) account for steam, heat or cooling received as 'waste energy' from a third party's industrial processes under 'purchased or acquired' energy; (h) (AR 32(i) amended) account for renewable hydrogen as a renewable fuel. Hydrogen that is not completely derived from renewable sources shall be included under 'fuel consumption from other non-renewable sources'; and (i) (AR 32(j) amended) adopt a conservative approach when splitting the electricity, steam, heat or cooling between renewable and non-renewable sources and indicate whether it derives the fraction of renewables from the market-based or location-based approach. The undertaking that relies on the market-based approach shall consider energy consumption as deriving from renewable sources only if the nature of the purchased environmental

[3] This information supports the information needs of financial market participants subject to Regulation (EU) 2019/2088 because it is derived from a mandatory indicator related to principal adverse impacts as set out by Indicator #5 in Table I of Annex I of Commission Delegated Regulation (EU) 2022/1288 with regard to disclosure rules on sustainable investments ('Share of non-renewable energy consumption and production').

	attribute is clearly defined in the contractual arrangements with its ***suppliers*** (i.e. renewable power purchasing agreement, standardised green electricity tariff, market instruments such as Guarantee of Origin from renewable sources in Europe[4] or similar instruments such as Renewable Energy Certificates in the US and Canada).

Disclosure Requirement E1-8 – *Gross scope 1, 2, 3 GHG emissions*

28. (45 amended) The objective of this DR is to enable an understanding of the undertaking's direct and indirect ***impacts*** on climate change as a result of activities in its own operations and in its upstream and downstream value chain***.***

29. (44 amended) The undertaking shall disclose absolute gross ***GHG emissions*** generated during the reporting period, expressed as metric tonnes of CO_2eq classified as:

    (a) (44(a) amended) ***scope 1 GHG emissions***, including the percentage of scope 1 GHG emissions from the EU Emission Trading System (EU ETS) if it has emissions from this system;

    (b) (44(b) amended) ***scope 2 GHG emissions*** (location-based and market-based); and

    (c) (44(c) amended) ***scope 3 GHG emissions*** from each significant ***scope 3 category*** as a total and per category.

30. (AR 43(c) amended) The undertaking shall disclose its direct biogenic CO_2 emissions from the combustion or biodegradation of biomass separately from ***scope 1 GHG emissions***.

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AR 19 for para. 29 **(Emissions reporting boundary)**	Chapter 5 of ESRS 1 *General Requirements* defines the reporting boundary to be applied. The starting point of that boundary corresponds to financial control as per the GHG Protocol Corporate Accounting and Reporting Standard (2004). In addition, the undertaking applies the provisions in paragraphs 72 (leased assets), 73 (benefit schemes) and AR 35 for paragraph 62 (joint operations) of ESRS 1 *General Requirements*. When, due to specific facts and circumstances, the information reported in paragraph 29(a)(b) is insufficient to portray the emissions resulting from operated assets that are outside the reporting boundary, the undertaking shall report GHG scope 1 and 2 emissions calculated on the basis of its operational control boundary as defined by the GHG Protocol Corporate Accounting and Reporting Standard (2004).
AR 20 for paras. 28 and 29 **(Emissions reporting)**	(AR 39 amended) When preparing the information for reporting ***GHG emissions***, the undertaking shall: (a) (AR 39(a) amended) consider the GHG Protocol Corporate Accounting and Reporting Standard (2004). The undertaking may also consider Commission Recommendation (EU) 2021/2279[5] or EN ISO 14064-1:2018. In all cases, the requirements of ESRS take precedence over the above-mentioned GHG accounting standards (e.g. regarding reporting boundaries);

[4] Based on Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

[5] Commission Recommendation (EU) 2021/2279 of 15 December 2021 on the use of the Environmental Footprint methods to measure and communicate the life cycle environmental performance of products and organisations (OJ L 471, 30.12.2021, p. 1).

	(b) (AR 39(c) amended) include emissions of CO_2, CH_4, N_2O, HFCs, PFCs, SF_6 and NF_3. Additional GHGs may be considered when significant; (c) (AR 39(d) amended) use the most recent ***Global Warming Potential (GWP)*** values published by the Intergovernmental Panel on Climate Change (IPCC) based on a 100-year time horizon to calculate CO_2eq emissions of non-CO_2 gases. If emission factors based on older GWP values are the most suitable or available, the undertaking can use these and explain in accordance with ESRS 2 GDR-M, paragraph 49, which GWPs the GHG inventory is based on; (d) (AR 43(d), AR 45(f), AR 46(k) amended) not include any removals, any purchased, sold or transferred ***carbon credits*** or any GHG allowances in the calculation of GHG emissions; and (e) (AR 43(c), AR 45(e), AR 46(j) amended) not include biogenic emissions of CO_2 from the combustion or biodegradation of biomass in scope 1, 2 and 3. The undertaking shall include non-CO_2 GHG emissions, such as CH_4 and N_2O in the relevant scopes.
AR 21 for para. 29(a) **(Scope 1 EU ETS emissions)**	(AR 43(e) amended) For activities covered by the EU Emissions Trading System (ETS), the undertaking shall report on scope 1 emissions following the EU ETS methodology. The EU ETS methodology may also be applied to activities in geographies and sectors that are not covered by the EU ETS provided the methodology is aligned with local jurisdictional rules and relevant for the undertaking.
AR 22 for para. 29(a) **(Scope 1 emissions reporting)**	(AR 44 amended) When preparing the information on the percentage of ***scope 1 GHG emissions*** from EU ETS required under paragraph 29(a), the undertaking shall: (a) consider ***GHG emissions*** from its emission sources that are subject to EU ETS; (b) ensure the same accounting period for gross scope 1 GHG emissions and GHG emissions regulated under the ETS; and (c) calculate the share by using the following formula: $\% = \frac{\text{GHG emisssions (tCO2eq)from emission sources subject to EU ETS}}{\text{Scope 1 GHG emissions (tCO2eq)}}$
AR 23 for para. 29(b) **(Scope 2 emissions reporting)**	(AR 45 amended) When preparing the information on gross ***scope 2 GHG emissions*** required under paragraph 29, the undertaking shall: (a) (AR 45(a) amended) consider the GHG Protocol scope 2 Guidance (Version 2015), particularly the scope 2 quality criteria in Chapter 7.1 relating to contractual instruments. The undertaking may also consider Commission Recommendation (EU) 2021/2279 or the relevant requirements for the quantification of ***indirect GHG emissions*** from imported energy in EN ISO 14064-1:2018; and (b) (AR 45(d) amended) in accordance with ESRS 2 GDR-M, provide information about any contractual instruments that is necessary to inform users' understanding of the entity's scope 2 market based GHG emissions.
AR 24 for para. 29(c)	(AR 46 amended) When preparing the information on gross ***scope 3 GHG emissions*** required under paragraph 29, the undertaking shall:

(Scope 3 emissions reporting)	(a) (AR 46(a) amended) consider the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Version 2011). The undertaking can also consider Commission Recommendation (EU) 2021/2279 or the relevant requirements for the quantification of ***indirect GHG emissions*** from EN ISO 14064-1:2018; (b) (AR 46(c) amended) screen its total scope 3 GHG emissions based on the 15 scope 3 categories identified by the GHG Protocol Corporate Standard and GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Version 2011), using relevant estimates. Alternatively, the undertaking may screen its ***indirect GHG emissions*** based on the categories provided by EN ISO 14064-1:2018, Clause 5.2.4 (excluding indirect GHG emissions from imported energy); (c) (AR 46(d) amended) identify and disclose its significant scope 3 categories based on the magnitude of their estimated GHG emissions and other criteria provided by the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Version 2011, p. 61 and 65-68) or EN ISO 14064-1:2018, Annex H.3.2, such as financial spend, influence, related ***transition risks*** and ***opportunities*** or ***stakeholder*** views; (d) (AR 46(g) amended) prioritise its inputs and assumptions based on the characteristics of the data (e.g. data from specific activities within the entity's upstream and downstream value chain; timely data that faithfully represents the jurisdiction of, and the technology used for, the upstream and downstream value chain activity and its GHG emissions; and data that has been verified); (e) (AR 46(e) amended) update scope 3 GHG emissions in each significant category every year on the basis of current activity data and update the full scope 3 GHG inventory at least every three years or on the occurrence of a significant event or a significant change in circumstances; (f) (AR 46(b) amended) consider the GHG Accounting and Reporting Standard for the Financial Industry from the Partnership for Carbon Accounting Financials (PCAF), specifically Part A *Financed Emissions* 'PCAF (2022). The Global GHG Accounting and Reporting Standard Part A: Financed Emissions. Second Edition' , if it is a financial institution; and (g) (AR 51 amended) if applicable, disclose GHG emissions from purchased cloud computing and data centre services as a subset of the overarching scope 3, category 1 'upstream purchased goods and services'.
AR 25 for paras. 28 and 29 **(Emissions disaggregation)**	(AR 49 amended) The undertaking shall disaggregate its ***GHG emissions*** in accordance with the provisions of ESRS 1 *General Requirements*, Chapter 3.3.2, if applicable. For example, it can disaggregate its GHG emissions by country or geography, operating segments, economic activity, subsidiary, GHG (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3 and other GHGs considered by the undertaking) or source type (stationary combustion, mobile combustion, process emissions and fugitive emissions).
AR 26 for paras. 28 and 29 **(Emissions disaggregation)**	(AR 52 amended) The undertaking may present its ***GHG emissions*** in accordance with the table below, populating the rows as relevant in line with its disclosures under paragraph 29. A comparison of the undertaking's emissions over time may be performed by comparing current year emissions to a meaningful comparative, e.g. a ***GHG emission reduction target*** base year, indicating the percentage change (reduction/increase) in the corresponding column.

	Comparative		Current Year	% Change
	Year	Emissions	Emissions	
Scope 1 GHG emissions				
Gross scope 1 GHG emissions (tCO_2eq)				
Percentage of scope 1 GHG emissions from the EU Emissions Trading System (EU ETS) (%)				
Scope 2 GHG emissions				
Gross location-based scope 2 GHG emissions (tCO_2eq)				
Gross market-based scope 2 GHG emissions (tCO_2eq)				
Significant scope 3 GHG emissions				
Total gross indirect (scope 3) GHG emissions (tCO_2eq)				
1. Purchased goods and services				
[sub-category: Cloud computing and data centre services				
2. Capital goods				
3. Fuel and energy-related activities (not included in scope 1 or scope 2)				
4. Upstream transportation and distribution				
5. Waste generated in operations				
6. Business traveling				
7. Employee commuting				
8. Upstream leased assets				
9. Downstream transportation				

10. Processing of sold products				
11. Use of sold products				
12. End-of-life treatment of sold products				
13. Downstream leased assets				
14. Franchises				
15. Investments				
Direct biogenic scope 1 emissions				

Disclosure Requirement E1-9 – *GHG removals and GHG mitigation projects financed through carbon credits*

31. (57 amended) The objective of this DR is to enable an understanding of the undertaking's ***actions*** to reduce and permanently remove GHGs from the atmosphere and of the amount and quality of ***carbon credits*** it has purchased or intends to purchase from the voluntary market.

32. (58 amended) If it has implemented ***GHG removal and storage*** projects, the undertaking shall disclose information about the projects it has developed in its own operations or contributed to in its upstream and downstream value chain, including:

    (a) (AR 57 amended) a brief description of the GHG removal and storage projects;

    (b) (58(a) amended) the amount of GHG removals and storage resulting from each project;

    (c) (AR 57(d) amended) how the ***risk*** of non-permanence is managed, including assumptions and determining and monitoring leakage and reversal events if applicable; and

    (d) (AR 60 amended) disclose any reversals (in tCO_2eq) that may have occurred in the reporting period and decrease the amount of CO2 removed and stored by the same amount.

33. (59 amended) The undertaking shall disclose information about any projects outside its own operations and its upstream and downstream value chain that it has financed or intends to finance through any purchase of ***carbon credits***, including:

    (a) (59 (a) amended) the amount of carbon credits in tCO_2eq that are verified against ***recognised quality standards for carbon credits*** and cancelled in the reporting period;

    (b) (59 (b) amended) the amount of carbon credits in tCO_2eq purchased in the reporting period and not cancelled yet; and

    (c) (AR 62(a)(b) amended) the share of carbon credits from removal projects (percentage of total carbon credit volume), with an explanation of whether they are from nature-based or technological sinks.

34. (61 amended) In the case where the undertaking has made public claims of GHG neutrality that involve the use of ***carbon credits***, it shall explain:

    (a) whether and how these claims and the reliance on carbon credits neither hinder nor undermine the achievement of its ***GHG emission reduction targets***; and

    (b) the credibility and integrity of the carbon credits used by referring to ***recognised quality standards for carbon credits*** and any other factors necessary to understand the credibility and integrity of the carbon credits the undertaking plans to use.

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AR 27 for para. 32 **(GHG removals and storage)**	(AR 58 amended) GHG removals and storage include both ***nature-based solutions*** as well as technological removals and storage. When preparing information on its projects, the undertaking shall: (a) (AR 58(b) amended) apply consensus methods on accounting for GHG removals as soon as they are available, such as the EU Carbon Removals and Carbon Farming Certification (CRCF) Regulation[6]; (b) (AR 58(d) amended) include in the calculation the removals from operations that it owns, controls or contributes to, that have not been sold to another party through ***carbon credits***, and that are not double counted or reported; (c) (AR 58 (f) amended) account for the ***GHG emissions*** associated with a removal activity, including transport and storage, under ESRS E1-8; and (d) (AR 59 amended) include in the calculation the removal activities in the upstream and downstream value chain that the undertaking is actively contributing to, e.g., through a cooperation project with a ***supplier***.
AR 28 for para. 33 **(Carbon credits)**	(AR 63 amended) When preparing the information on ***carbon credits***, the undertaking shall: (a) (AR 63(a) amended) consider ***recognised quality standards for carbon credits***; (b) (AR 63(c) amended) in order to avoid double counting, not include carbon credits issued from ***GHG emission reduction*** projects nor GHG emission removal projects within its own operations or upstream and downstream its value chain; and (c) (AR 63(g) amended) calculate the amount of carbon credits to be cancelled in the future as the sum of carbon credits in metric tonnes of CO_2eq over the duration of existing contractual agreements.

Disclosure Requirement E1-10 – *Internal carbon pricing*

35. (New) The objective of this DR is to enable an understanding of the role of internal carbon pricing in guiding the undertaking's strategic and operational decision-making to reduce ***GHG emissions***.

36. (63 amended) The undertaking shall disclose information related to its use of ***internal carbon pricing schemes***, namely:

    (a) an explanation of whether and how the undertaking applies carbon pricing in decision-making (for example, investment decisions, transfer pricing and ***scenario analysis***) and the consistency of the prices used versus the prices used in the financial statement for impairment tests; and

    (b) the average carbon price per metric tonne of ***GHG emissions*** for each internal pricing scheme.

Disclosure Requirement E1-11 – *Anticipated financial effects from material physical and transition risks and potential climate-related opportunities*

37. (64 amended) The objective of this DR is to enable an understanding of how the identified climate-related material ***physical*** and ***transition risks*** and ***climate-related opportunities*** are expected to affect the undertaking's financial position and future performance. Paragraphs 38 and 41 of this Standard add topical specifications to ESRS 2 SBM 3. The information required for this DR is part of the information on current and anticipated financial effects required under ESRS 2 SBM-3.

[6] Regulation (EU) 2024/3012 of the European Parliament and of the Council of 27 November 2024 establishing a Union certification framework for permanent carbon removals, carbon farming and carbon storage in products

38. (66 amended) The undertaking shall disclose the ***anticipated financial effects*** from ***material physical risks***, including:

    (a) the carrying amount of assets at material physical risk before considering ***climate change adaptation actions***, including the relevant time horizons;

    (b) the percentage of the (carrying amount of) assets at material physical risk addressed by adaptation ***actions*** at the reporting date; and

    (c) the monetary amount of net revenue from its business activities at material physical risk, including the relevant time horizons.

39. (67 amended) The undertaking shall disclose the ***anticipated financial effects*** from material ***transition risks***, including:

    (a) the carrying amount of assets at material transition risk, including the relevant time horizons, and a range of estimated potential ***stranded assets*** from the reporting year until the mid-term and long-term time horizons based on a scenario aligned with limiting climate change to 1.5°C;

    (b) the percentage of the (carrying amount of) assets at material transition risk addressed by mitigation ***actions***;

    (c) a breakdown of the carrying amount of its real estate assets that have been used as loan collaterals by energy-efficiency classes;

    (d) the estimated potential liabilities related to climate transition that do not meet the accounting recognition criteria at the reporting date but that may have to be recognised in financial statements in future periods; and

    (e) the monetary amount of net revenue from its business activities at material transition risk and, if applicable, the net revenue from its customers operating in coal-, oil- and gas-related activities, including the relevant time horizons.

40. (AR 69 and AR 72 amended) The undertaking shall disclose the methodology applied to quantify the amounts disclosed under paragraphs 38 and 39, including the scope adopted in the calculation, critical assumptions, parameters and limitations, including whether the calculation leverages on the process (e.g. scenario analysis) used to identify and assess transition risks.

41. (69 amended) The undertaking shall disclose the amount of assets or revenue from its business activities related with the identified ***climate-related opportunities***, including their associated time horizons.

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AR 29 for paras. 38–41 **(Calculation approaches)**	(AR 69 amended) When disclosing the information required under paragraphs 38 to 41, the undertaking shall adopt the following approaches: (a) consider the time horizons (short-, medium- and long-term) over which the effects of ***climate-related risk and opportunities*** could reasonably be expected to occur; (b) include all of the types of the undertaking's own physical assets, including finance-lease / the underlying asset of the right-of-use assets; (c) present the monetary amounts (or percentages) as either a single amount or range; (d) present the carrying amount of assets as of the reporting date and the net revenue as those related to the reporting period; (e) for paragraph 39(c), present the energy efficiency class in terms of either ranges of energy consumption in kWh/m^2 or the Energy Performance Certificate (EPC) label class. If the undertaking cannot obtain this information without undue cost and effort, it shall

	disclose the total carrying amount of the real estate assets for which the energy consumption is based on internal estimates; and (f) disclose net revenue and the carrying amount of assets, making it consistent with the financial statements.
AR 30 for paras. 38(c), 39(a) and 39(e) **(Gross vs net)**	When disclosing on paragraph 38(c), 39(a) and 39(e), the undertaking shall explain whether the amount is assessed before or after mitigation ***actions***.
AR 31 for para. 39(d) **(Estimated potential liabilities)**	If the undertaking discloses the information prescribed under 39(d) in its financial statement, it shall refer to it.
AR 32 for paras. 40 **(Location of assets)**	When disclosing the methodology applied to quantify the amounts disclosed under paragraphs 38 and 39, the undertaking shall include where relevant the location of its assets at material ***physical risks*** aggregated in a way that support faithful representation of its risks.

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