



CLIMATE X

CSRD

A Guide to the Physical Risk Requirements

Reporting Physical Risk: Technical Requirements

Companies are bound to disclose how climate change could physically impact different assets and business of a company, and if available, what is the oversight within the companies to address such impacts to build resilience (as mentioned in [paragraphs 18-21](#) of ESRS E1 (Climate Change) under IRO-1, E1-2—4, and E1-9, see details below).

This includes detailing a comparative vulnerability/risks situation of all the assets a company owns in different parts of the globe under different climate scenarios (i.e., business as usual, middle of the road, and worst-case scenarios (as discussed in [paragraphs 20b and 21](#)).

Disclosure Requirements

- ESRS 2 General disclosures

Governance

- Disclosure requirement related to ESRS 2 GOV-3 Integration of sustainability-related performance in incentive schemes

Strategy

- Disclosure Requirement E1-1 — Transition plan for climate change mitigation
- Disclosure Requirement related to ESRS 2 SBM-3 — Material impacts, risks and opportunities and their interaction with strategy and business model

Impact, risk and opportunity management

- Disclosure requirement related to ESRS 2 IRO-1 — Description of the processes to identify and assess material climate-related impacts, risks and opportunities
- Disclosure Requirement E1-2 — Policies related to climate change mitigation and adaptation
- Disclosure Requirement E1-3 — Actions and resources in relation to climate change policies

Metrics and targets

- Disclosure Requirement E1-4 — Targets related to climate change mitigation and adaptation
- Disclosure Requirement E1-5 — Energy consumption and mix
- Disclosure Requirement E1-6 — Gross Scopes 1, 2, 3 and Total GHG emissions
- Disclosure Requirement E1-7 — GHG removals and GHG mitigation projects financed through carbon credits
- Disclosure Requirement E1-8 — Internal carbon pricing

- Disclosure Requirement E1-9 — Anticipated financial effects from material physical and transition risks and potential climate-related opportunities

Appendix A: Application Requirements

- ESRS 2 General disclosures

Strategy

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

Impact, risk and opportunity management

- Disclosure Requirement E1-2 — Policies related to climate change mitigation and adaptation
- Disclosure Requirements E1-3 — Actions and resources in relation to climate change policies

Metrics and targets

- Disclosure Requirement E1-4 — Targets related to climate change mitigation and adaptation
- Disclosure Requirement E1-5 — Energy consumption and mix
- Disclosure Requirements E1-6 — Gross Scopes 1, 2, 3 and Total GHG emissions
- Disclosure Requirement E1-7 — GHG removals and GHG mitigation projects financed through carbon credits
- Disclosure Requirement E1-8 — Internal carbon pricing

- Disclosure Requirement E1-9 — Anticipated financial effects from material physical and transition risks and potential climate-related opportunities

DESCRIPTION: KEY PHYSICAL RISK AND ADAPTATION
REPORTING REQUIREMENTS OF CSRD.

Under CSRD requirements, the General Disclosures detail the specificities regarding physical climate risks (i.e., what exactly the companies are required to account for when reporting under the CSRD framework).

For instance, the requirements related to **Impact, Risks, Opportunity (IRO)-1**, and **sub-requirements Environment (E1)-2—4**, and **E1-9** focus on climate risks, impacts, opportunities, and adaptation.



Specifically, **ESRS 2 IRO-1** requires disclosure of a detailed description of the processes a company adopts to identify and estimate material climate change-related impacts, risks, and opportunities (**ESRS 2 IRO-1 paragraphs 20b and 21 relating to climate physical risk**).

This includes considering various hazards a company's assets might be exposed to (both acute and chronic) along with the vulnerabilities and material financial implications in the face of disastrous events under short-, medium-, and long-term climate change scenarios (**AR11**).

Similarly, **E1-2** and **E1-3** emphasize policies related to climate mitigation/adaptation (**E1-2**) along with providing information regarding the actions or resource allocation concerning climate change policies (**E1-3**).







In terms of Metrics and Targets, key requirements include disclosure of anticipated financial impacts from material/transition risks/opportunities (**E1-9**) along with the details of targets set by the companies for climate change mitigation and adaptation (i.e., has the company incorporated the physical climate risks into its short or long-term business plans to be more resilient in the future?) (**E1-4**).

We have created a summary of the key reporting elements for each category, with reference to their paragraph in the [CSRD law text](#).


We also noted whether Climate X can support with the requirement , with Spectra  (physical risk platform) or Adapt  (climate adaptation platform).

Organisations are required to consider and report on:

Impact, risk and opportunity management (ESRS 2 IRO-1):

-  Explain the process to **identify and assess physical risk** under in its own operations and value chain, under different climate change scenarios (ESRS 2 IRO-1 paragraphs 20b, 21), with the consideration of at least a high emission scenario (i.e., RCP8.5).
-  Explain the process to: (AR 11)
 -  — Identify hazards;
 -  — Define short, medium, and long term time horizons;
 -  — Assess exposure of assets and business activities, considering asset location and physical hazards' likelihood and severity;
 -  — Assess physical risk under a high-emission scenario.

It is noted that climate change scenarios analysis must be tailored to the size, nature, and complexity of the organization and its operations, as stressed in AR 13.


-  TCFD, ISO and NGFS guidance and similar can be used for support (AR 14).

Plus, the climate change scenarios need to be aligned to the assumptions made in the financial statements (AR 15).

Policies (E1-2):

Describe **policies** to manage material **impacts, risks, and opportunities** related to climate change **mitigation** and **adaptation**. (E1-2, pp. 22-25, AR 16-18).





Actions (E1-3):

-  Disclose **mitigation and adaptation actions** to manage material climate-related **impacts, risks and opportunities**, and the resources allocated (E1-3, pp. 26-29, AR 19-22).



Targets (E1-4):

-  Describe **targets** to manage material climate-related **impacts, risks and opportunities**, for example, climate change adaptation and physical risk mitigation (E1-4, pp. 30-31, AR 23-31).






Metrics and Targets (ESRS 2 E1-9):

-  Disclose the **anticipated financial effects** for physical risks before considering climate change adaptation actions (p. 64a), with the following detail:
 -  — Calculated as monetary amount of assets, disaggregated by acute and chronic physical risk (p. 66a, AR 70a).
 -  — Calculated as proportion (i.e., percentage) of assets (p. 66a, AR 70a).
 - Calculated as a percentage of total assets (p. 66a, AR 70a).
 -  — Note: Include the proportion of at-risk assets addressed by adaptation actions (p. 66b, AR70d).
 - Note: Include all types of assets including finance-lease / right-of-use assets (AR 70b).

Disclose the net revenue from the organisation's business activities at material physical risk (p. 66d, AR 71), based on accounting standards (p. 68a):

-  — Calculated as monetary amount. (p. 66d).
-  — Calculated as proportion (i.e., percentage) of net revenue (p. 66d).

All the points above should include:

-  — Short-, medium- and long-term horizons. (p. 66d)
-  — Location of significant assets at material physical risk (p. 66c).
-  Disclose the organisation's potential to benefit from material climate-related opportunities (p. 64c), considering:
 -  — Expected **cost savings** from **adaptation actions** (p. 69a), with detail on the nature of the cost savings, time horizon, methodology and more as in AR 80.
 -  — Calculate the percentage of assets at material physical risk (from p. 66a) that is addressed by the climate change adaptation actions (66b, AR 70d).

Plus, a description of:

- S** — How the financial effects were assessed, with detail on scope of application, time horizons, calculation methodology, critical assumptions and parameters and limitations of the assessment (AR 69a).
- S** — How the time horizons used are defined and how these are linked to the organisations' strategic planning (AR 11b, AR 69b).
- Reconciliations to the relevant line items (based on IFRS reporting standard) or notes in the financial statements of significant amounts of the assets, liabilities and net revenue at material physical risk (p. 68, AR 77).