Sustainability

# ECPI Sovereign Bond ESG Rating

## Methodology & Research Process

July 2026

Version 2.0

PUBLIC DISCLOSURE ON THE METHODOLOGY MODELS, AND KEY RATING ASSUMPTIONS USED IN ESG RATING ACTIVITIES

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# Figures & Tables

## Figures

# Regulation (EU) 2024/3005: Public Disclosure on the Methodology, Models, and Key Rating Assumptions Used in ESG Rating Activities

This disclosure is published to meet the relevant requirements of the EU ESG Ratings Regulation (EU2024/3005) and related regulatory technical standards. The following index cross-references to the relevant information are made available within the ECPI Sovereign Bond ESG Rating Methodology Document and on our website.

Within this disclosure, the Regulation (EU) 2024/3005 of the European Parliament and of the Council of 27 November 2024 on the transparency and integrity of Environmental, Social and Governance (ESG) rating activities is referred to as "**Regulation (EU) 2024/3005**".

Within this disclosure, the Commission Delegated Regulation (EU) of 21 04 2026 supplementing Regulation (EU) 2024/3005 of the European Parliament and of the Council with regard to regulatory technical standards specifying the elements of ESG rating products to be disclosed to the public and to users of ESG ratings, rated items and issuers of rated items is referred to as "**Delegated Regulation**".

| REGULATION (EU) 2024/3005 | DELEGATED REGULATION | REQUIRED INFORMATION | ISS GERMANY AG DISCLOSURE |
|---|---|---|---|
| **Rating Product Disclosures** | | | |
| **ANNEX III.1.f** | Article 3(1) | ESG rating providers shall disclose information on the ESG rating's clearly defined objective and marking whether the rating is assessing risks, impacts, or both, according to the double materiality principle, or any other dimensions, and in the case of double materiality the proportion of the risk and impact materiality.<br><br>ESG rating providers shall disclose at the level of each ESG rating product:<br>a) a description of the risks covered, where the ESG rating is assessing risks;<br>b) a description of the impacts covered, where the ESG rating is assessing impacts;<br>c) information on how the risk and impact materiality are taken into account according to the double materiality principle, where applicable;<br>d) where the ESG rating is based on other materiality dimensions, a description of those dimensions. | Please refer to:<br><br>• ECPI Sovereign Bond ESG Rating Objective |
| **ANNEX III.1.g** | Article 3(2) | ESG rating providers shall disclose the ESG rating's scope, namely, whether it covers an individual E, S, or G factor or whether it is an aggregated rating aggregating E, S and G factors, or whether it covers specific issues such as transition risks.<br><br>ESG rating providers shall disclose at the level of each ESG rating product:<br>a) a description of what is covered under the E, S or G factors and which factors are aggregated, where applicable; | Please refer to:<br><br>• Rating Structure and Weightings |

| REGULATION (EU) 2024/3005 | DELEGATED REGULATION | REQUIRED INFORMATION | ISS GERMANY AG DISCLOSURE |
|---|---|---|---|
| | | b) a description of the specific issues that the ESG rating covers. | |
| **ANNEX III.1.h** | N/A | ESG rating providers shall disclose in the case of an aggregated ESG rating, the weighting of the three overarching E, S and G categories of factors (for example 33 % for the E factor, 33 % for the S factor, 33 % for the G factor), and the explanation of the weighting method, including weight per individual E, S and G category. | Please refer to:<br>• Rating Structure and Weightings |
| **ANNEX III.1.i** | N/A | ESG rating providers shall disclose within the E, S or G factors, specification of the topics covered by the ESG rating, and whether they correspond to the topics from the sustainability reporting standards developed pursuant to Article 29b of Directive 2013/34/EU. | Please refer to:<br>• ESG Categories and Indicators |
| **ANNEX III.1.j** | N/A | ESG rating providers shall disclose information on whether the rating is expressed in absolute or relative value. | Please refer to:<br>• Rating Structure and Weightings |
| **ANNEX III.1.o**<br>**ANNEX III.1.p** | Article 3(3)<br>Article 3(4) | ESG rating providers shall disclose if an ESG rating of a rated item covers the E factor, information on whether that rating takes into account the targets and objectives of the Paris Agreement or any other relevant international agreements.<br><br>ESG rating providers shall disclose if an ESG rating of a rated item covers the S and G factors, information on whether that rating takes into account any relevant international agreements. | Please refer to:<br>• Methodology<br>• ESG Categories and Indicators |

| REGULATION (EU) 2024/3005 | DELEGATED REGULATION | REQUIRED INFORMATION | ISS GERMANY AG DISCLOSURE |
|---|---|---|---|
| | | ESG rating providers shall at the level of each ESG rating product:<br>a) include an indication of whether the ESG rating takes into account the targets and objectives of the Paris Agreement and which other international agreements are considered, with reference to basic identifying information on these agreements together with an explanation of their relevance to the ESG rating;<br>b) specify whether the ESG rating is assessing alignment of commitments against the objectives of the agreements referred to in point (a). | |
| **Basic Methodological Disclosures** | | | |
| **ANNEX III.1.a** | Article 4(1) | ESG rating providers shall disclose an overview of the rating methodologies used and changes thereto, including whether analysis is backward-looking or forward-looking and the time horizon covered.<br>ESG rating providers shall disclose:<br><br>a) the title of the rating methodology used;<br>b) a description of the types of rated items in relation to which the methodology referred to in point (a) applies;<br>c) the time horizon over which the ESG rating is considered valid, where applicable<br>d) a list and overview of the relevant supporting models and key rating assumptions, where applicable; information on measures and procedures to ensure the quality and reliability of data used; | Please refer to:<br>Points a) and f)<br>• Appendix I - Version Control<br><br>Points b) and e)<br>• b) ECPI Sovereign Bond ESG Rating Objective<br>• c) Update Cycle<br>• d) Quality Assurance<br>• e) ECPI ESG Rating Scale |

| REGULATION (EU) 2024/3005 | DELEGATED REGULATION | REQUIRED INFORMATION | ISS GERMANY AG DISCLOSURE |
|---|---|---|---|
| | | e) a description of the defined ranking system of rating categories used, with reference to:<br>i. the meaning of each rating category for absolute and relative values and how the ranking system should be interpreted;<br>ii. in the case of relative values, an explanation as to whether they are relative to a specific industry, geographical area, peer groups or other comparative references and their respective description.<br>f) the dates of the most recent update of the methodology and a description of the changes introduced to the previous version. | |
| **ANNEX III.1.b** | Article 4(2) | ESG rating providers shall disclose the industry classification used.<br><br>ESG rating providers shall provide:<br>a) the name of the issuing body of the industry classification used;<br>b) the name and version of the industry classification used;<br>c) any publicly available link to the official documentation of the industry classification system. | • This requirement is not applicable as industry classification is not used for the ECPI Sovereign Bond ESG Rating. |
| **ANNEX III.1.c** | Article 4(3) | ESG rating providers shall disclose an overview of data sources, including whether data is sourced from sustainability statements required under Directive 2013/34/EU or from information disclosed under Regulation (EU) 2019/2088 and whether sources are public or non-public, and an overview of data processes, estimation of input data in case of unavailability and frequency of data updates. | Please refer to:<br><br>• Data Sources: ESG Categories and Indicators; Information Sources<br>• Data Processes: Assessment Overview |

| REGULATION (EU) 2024/3005 | DELEGATED REGULATION | REQUIRED INFORMATION | ISS GERMANY AG DISCLOSURE |
|---|---|---|---|
| | | ESG rating providers shall include a description of the engagement process with rated items or issuers of rated items, including how the input from such engagement is taken into account. | • Estimation of Input Data: Use of Estimated Data<br>• Frequency of Data Updates: Update Cycle<br>• Engagement with rated items or issuers of rated items is not part of the ECPI Sovereign Bond ESG Rating process. |
| **ANNEX III.1.e** | Article 4(4) | ESG rating providers shall disclose information on whether and how the rating methodologies are based on scientific evidence.<br><br>ESG rating providers shall where applicable, describe the process for identifying relevant scientific evidence. | Please refer to:<br><br>• Methodology |
| **ANNEX III.1.k** | N/A | ESG rating providers shall disclose where applicable, reference to the use of artificial intelligence in the data collection or rating process including information about current limitations and risks of using artificial intelligence. | • This requirement is not applicable to the ECPI Sovereign Bond ESG Rating |
| **Limitations in data sources, methodologies and information** | | | |

| REGULATION (EU) 2024/3005 | DELEGATED REGULATION | REQUIRED INFORMATION | ISS GERMANY AG DISCLOSURE |
|---|---|---|---|
| **ANNEX III.1.m** | Article 5 | ESG rating providers shall disclose any limitation in data sources and methodologies used for the construction of ESG ratings. | Please refer to:<br>• Limitations<br>• Limitations to Methodologies & Data |
| **ANNEX III.1.q** | Article 5 | ESG rating providers shall disclose any limitation on the information available to ESG rating providers.<br>ESG rating providers shall explain any limitations in respect of the following:<br>a) the availability or consistency of data used in the rating process;<br>b) the completeness, timeliness and accuracy of information;<br>c) the use of assumptions, proxy reference points and data estimation. | |
| **Organisational Disclosures** | | | |
| **ANNEX III.1.d** | Article 6(2) | ESG rating providers shall disclose the ownership structure of the ESG rating provider.<br><br>ESG rating providers shall disclose:<br>a) a chart illustrating their ownership links with any parent undertaking and subsidiaries. The chart shall indicate, where applicable, whether any of those entities perform any of the activities listed in Article 16 (1) or services referred to in Article 16(6) of Regulation (EU) 2024/3005. | Please refer to:<br>• Ownership Structure |
| **ANNEX III.1.l** | Article 6(3) | ESG rating providers shall disclose general information on criteria used for establishing fees charged to clients, specifying the various elements taken into consideration, and general information on the business/payment model. | Please refer to:<br>• Pricing Policy |

| REGULATION (EU) 2024/3005 | DELEGATED REGULATION | REQUIRED INFORMATION | ISS GERMANY AG DISCLOSURE |
|---|---|---|---|
| | | ESG rating providers shall disclose the following:<br>a) how the criteria they apply for establishing fees ensure that fees are fair, reasonable, transparent and non-discriminatory in accordance with Article 27 of Regulation (EU) 2024/3005;<br>b) whether the ESG rating provider operates a subscription-paid model, an issuer-paid model, a combination of those models, or another model;<br>c) a description of the relevant business model, and the proportion of total annual revenue derived from each model;<br>d) where applicable, the impact of fees charged for services other than ESG rating activities on the determination of fees for ESG ratings, together with a description of those other services. | |
| **ANNEX III.1.n** | Article 6(1) | ESG rating providers shall disclose the main risks of conflicts of interest and the steps take to mitigate them.<br>ESG rating providers shall indicate the areas of the ESG rating provider's activities, services or organisational structure from which the main risks of conflicts of interest may arise. | Please refer to:<br>• Conflict of Interest Policy |

# Introduction

The objective of this document is to describe the ECPI Sovereign Bond ESG Rating Methodology in terms of analysis criteria and indicators, categories of attention, and evaluation aspects.

The ECPI Sovereign Bond ESG Rating is based on a structured and rules-based methodology that combines quantitative and qualitative ESG indicators assessed based on publicly available and third-party data sources. The methodology assesses sovereign issuers across Environmental, Social, and Governance dimensions through a transparent framework designed to support the evaluation of sustainability-related risks and performance factors.

## ECPI Sovereign Bond ESG Rating Objective

The ECPI Sovereign Bond ESG Rating assesses the environmental and social, and governance risk and impacts of sovereign issuers with a double materiality approach. Its objective is to provide investors with an independent, systematic, and forward-looking assessment of a country's sustainability performance and associated ESG risk profile and impact. The rating generates an absolute score, which may also be expressed as a relative ranking, enabling investors to compare sovereign issuers across a consistent set of ESG criteria.

The methodology applies a comprehensive framework of sustainability indicators informed by internationally recognised standards, conventions, treaties, and best practices. Given the long-term nature of sovereign debt instruments, the methodology adopts a long-term approach to materiality, considering both sustainability performance and ESG factors that may influence a country's long-term resilience and risk profile.

Assessments are based on publicly available information and evaluate both the existence of regulatory frameworks and their effective implementation. The methodology measures the extent to which governments establish, maintain, and enforce policies and practices aligned with recognised international standards.

The rating framework covers three pillars, Environmental, Social, and Governance. Each pillar is assessed through two dimensions: Regulatory Framework and Implementation. The resulting rating is a composite measure designed to assess a country's sustainability performance and ESG risk profile.

The methodology is applied consistently across all covered sovereign issuers, and ratings are reviewed annually. The document also describes the methodology applied to agencies, supranational entities, and local authorities.

## ESG Ratings (from F to EEE)

- ESG Total Rating => represents the final ESG assessment (Environmental, Social and Governance) and it is the translation of the Country total score.
- ESG ENVIRONMENTAL Rating => is the Environmental Rating of the Country

- ESG SOCIAL Rating => is the Social Rating of the Country
- ESG GOVERNANCE Rating => is the Governance Rating of the Country

## ESG Scores

- ESG TOTAL_SCORE from infinite <0 to 120 => ESG ENV SCORE + ESG SOC SCORE + ESG GOV SCORE
- ESG ENVIRONMENTAL SCORE from infinite <0 to 40 => represents the sum of all indicators (positive and negative) of the environmental performance of the Country.
- ESG SOCIAL SCORE from infinite <0 to 40 => represents the sum of all indicators (positive and negative) of the social performance of the Country
- ESG GOVERNANCE SCORE from infinite <0 to 40 => represents the sum of all indicators (positive and negative) of the governance performance of the Country.

where:

- ESG ENVIRONMENTAL SCORE is the sum of:
  - ESG ENVIRONMENTAL Regulatory Framework Score
  - ESG ENVIRONMENTAL Implementation Score
- ESG SOCIAL SCORE is the sum of:
  - ESG SOCIAL Regulatory Framework Score
  - ESG SOCIAL Implementation Score
- ESG GOVERNANCE SCORE is the sum of:
  - ESG GOVERNANCE Regulatory Framework Score
  - ESG GOVERNANCE Implementation Score

# ECPI Sovereign Bond ESG Methodology and Rating

## Methodology

The ECPI Sovereign Bond ESG Rating Methodology provides a structured framework for assessing the environmental, social, and governance characteristics of sovereign issuers. It combines indicators reflecting alignment with internationally recognised standards and principles with indicators measuring implementation outcomes and institutional effectiveness. The resulting assessment provides a consistent and comparable view of a country's sustainability performance and associated ESG risk profile.

The methodology is informed by internationally recognised frameworks, conventions, treaties, and principles relating to environmental protection, human rights, labour standards, anti-corruption, and sustainable development. These include, among others, the Universal Declaration of Human Rights, United Nations conventions, International Labour Organization standards, and multilateral environmental agreements.

Developed in collaboration with researchers and academics from Bocconi University's Ethical Finance Department, the methodology is based on academic research, scientific studies, internationally recognised standards, regulatory developments, and guidance issued by supranational organisations. Ongoing monitoring of sustainability research and policy developments helps ensure that the methodology remains relevant and reflects emerging sustainability challenges. The ECPI Sovereign Bond ESG Rating aims to provide a robust and evidence-based assessment of countries' sustainability performance and associated ESG risks.

**REGULATORY FRAMEWORK**

The methodology assesses the level of compliance of a government with a number of international treaties, conventions and best practices, which represent the international standard in each area (E, S, and G).

**IMPLEMENTATION**

The methodology verifies the effectiveness of a Government in implementing and enforcing national legislation compliant with international standards.

**GOAL**

The methodology is designed to identify and differentiate varying levels of sustainability performance, sustainability-related impacts, and ESG risks among sovereign issuers through a consistent scoring and rating framework.

The standard methodology is composed of two levels of analysis:

1. ESG Assessments

2. Cut-off criteria

# ESG Assessments

## Assessment Overview

Data collection and analysis for the ECPI Sovereign Bond ESG Rating is conducted in-house by trained and specialized analysts based on clear data collection and evaluation procedures.

The ESG Assessment comprises of three **sections**:

- Environment
- Social
- Governance

In each section two **categories** are considered:

- **Regulatory Framework**: assessing the country's commitment to sustainability by analysing the status of ratification of major international standards, treaties and conventions.
- **Implementation**: assessing the policies enacted and outcomes in terms of sustainability.

The ESG Assessments is constructed using a three-step approach aimed at reducing multidimensional data into one summary index:

1. Normalization of variables;
2. Aggregation of normalized variables into the sub-scores/rating representing a particular functional dimension;
3. Aggregation of the sub-scores/ratings into the final index.

In each **section,** the **category pairs** (Regulatory Framework and Implementation) are composed of a set of indicators that are internationally recognized and updated on a yearly basis.

Only variables that cover a sufficiently wide range of countries across a sufficiently long time period are selected.

Where data are not yet available for the latest year, the values are set equal to the latest available observations.

If the variable is unavailable for a country, its value is set at zero or at the lowest achievable value for that indicator.

Indicators are then normalized between -30 and 20 to facilitate aggregation over variables expressed in different measurement units.

## Rating Structure and Weightings

Starting from the bottom of the pyramid in Figure 1, indicators are then aggregated into six lower-level sub-indices constructed to measure how a country performs in term in terms of Regulatory Framework and Implementation in each ESG section.

These sub-indices are aggregated into three higher level sub-indices – Environmental Score, Social Score, Governance Score – which measure how the overall country performance is in each ESG section.

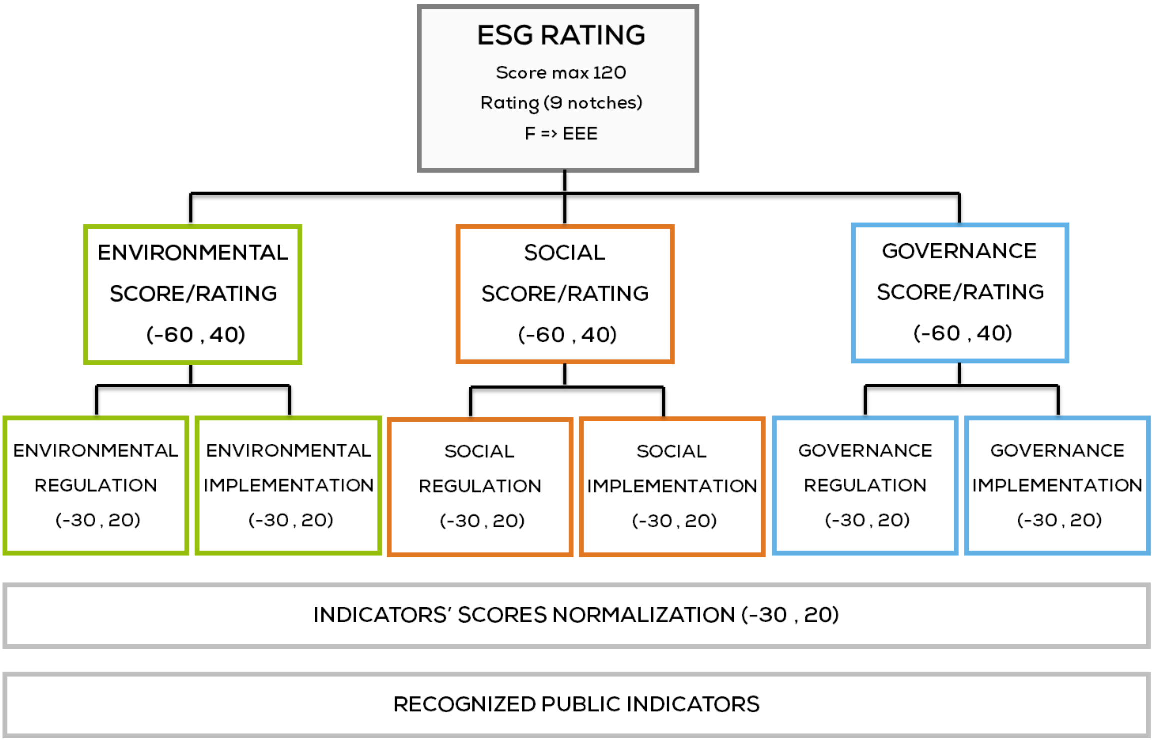
Finally, Environmental, Social, and Governance sub-indices are aggregated into the overall measure of ESG sustainability – the ECPI Sovereign Bond ESG Rating. The output of the rating is expressed in absolute values (scores and ratings).

By default, the scores in each section (E, S and G) are equally weighted. Within each section, each category (Regulatory Framework and Implementation) is equally weighted in terms of score allocation.

Under the standard methodology, countries receiving a final overall score below zero are assigned a rating of F.

Countries receiving a positive score are assigned a rating ranging from E to EEE according to the rating scale.

**Figure 1: ECPI Sovereign Bond ESG Rating**




*Source: ISS STOXX*

## Cut-Off Indicators

According to the standard methodology:

- Countries which retain death penalty, i.e. Countries defined as "retentionist", "abolitionist in practice", "abolitionist for ordinary crimes only" according to Amnesty International definitions, and/or

- Countries which are assessed as Not Free or Partly Free in terms of civil liberties and political rights are considered "Non-Eligible" (rating NE).

Furthermore, cut-off indicators deduct points from the overall ESG score (-30 each).

## ECPI ESG Rating Scale

**Figure 2: ECPI Sovereign Bond ESG Rating Scale (Standard Option)**

| ESG SCORE | SECTION (E - S - G) SCORE | RATING | LEVEL | DEFINITION |
|---|---|---|---|---|
| 105. - 120 | 35. - 40 | EEE | Very good | Countries display ***full*** compliance with international ESG standards, ***effective*** implementation, and ***efficient*** enforcement. |
| 90. - 105 | 30. - 35 | EEE- | | |
| 75. - 90 | 25. - 30 | EE+ | Good | Countries display ***adequate*** compliance with international ESG standards, ***good*** implementation, and ***sound*** enforcement. |
| 60. - 75 | 20. - 25 | EE | | |
| 45. - 60 | 15. - 20 | EE- | | |
| 30. - 45 | 10. - 15 | E+ | Fair | Countries display ***partial*** compliance with international ESG standards, ***acceptable*** implementation, and ***basic*** enforcement. |
| 15. - 30 | 5. - 10 | E | | |
| 0 - 15 | 0 - 5 | E- | | |
| < 0 | < 0 | F | Poor | Countries display ***poor*** overall ESG performance. |
| --- | --- | NE | Controversial | Countries retain **death penalty** and/or are classified **not free/partly free** in terms of civil liberties and polical rights. |

# ESG Categories and Indicators

Considering the nature of the assessed issuers, and the objective of the ECPI Sovereign Bond ESG Rating, the content of the topics covered by the solution do not correspond to the topics from the sustainability reporting standards developed pursuant to Article 29b of Directive 2013/34/EU.

The below lists the categories and indicators covered by the ECPI Sovereign Bond ESG Rating.

## Environmental Indicators

### Regulatory Framework

**Environmental Rights Conventions**
The status of ratification of the following conventions is verified on an annual basis:

- Basel Convention
- Kyoto Protocol
- Convention on Biological Diversity along with the Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress
- Cartagena Protocol on Biosafety
- Convention on International Trade in Endangered Species of Wild Fauna and Flora

- United Nations Convention to Combat Desertification
- Conventions on Ozone Layer protection (8 Conventions)
- Convention on Migratory Species
- Rotterdam Convention on Voluntary Prior Informed Consent procedure about hazardous import and export
- Convention on Wetlands of International Importance
- Paris Agreement

The assessment considers the extent to which countries have ratified, adopted, or otherwise adhered to relevant international environmental conventions and agreements.

## Implementation

**Environmental Performance Index (EPI)**
The EPI is a method of quantifying and numerically benchmarking the environmental performance of a country's policies. The index is developed by the Yale Center for Environmental Law & Policy at Yale University and the Center for International Earth Science Information Network (CIESIN) at Columbia University, in collaboration with the World Economic Forum and the Joint Research Centre of the European Commission.

This index is designed to supplement the environmental targets set forth in the U.N. Millennium Development Goals and includes the main areas:

- Environmental Health: including an assessment of aspects such as Environmental burden of disease, Water (effects on humans), and Air Pollution (effects on humans).
- Ecosystem Vitality: including an assessment of aspects such as quality of Water (effects on ecosystems) and Air Pollution (effects on ecosystems), Biodiversity and Habitat, Productive Natural Resources, and Climate Change.

**Trilemma Energy Performance Index**
The World Energy Council's Energy Trilemma Index tool, produced in partnership with Oliver Wyman, ranks countries on their ability to provide sustainable energy through three dimensions:

- Energy security,
- Energy equity (accessibility and affordability),
- Environmental sustainability.

The ranking measures overall performance in achieving a sustainable mix of policies and the balance grade highlights how well a country manages the trade-offs of the Trilemma with "A" being the best.

**Notre Dame - Global Adaptation Index (ND-GAIN)**
The Notre Dame-Global Adaptation Index (ND-GAIN) Country Index is a free opensource index that shows a country's current *vulnerability* to climate disruptions. It also assesses a country's *readiness* to leverage private and public sector investment for adaptive actions.

*Vulnerability* is defined as "Propensity or predisposition of human societies to be negatively impacted by climate hazards".

*Water Vulnerability* is assessed along the following dimensions:

- Projected change of annual runoff
- Projected change of annual groundwater recharge
- Fresh water withdrawal rate
- Water dependency ratio
- Access to reliable drinking water
- Dam capacity

*Ecosystem Vulnerability* is assessed along the following dimensions:

- Projected change of biome distribution
- Projected change of marine biodiversity
- Dependency on natural capital
- Ecological footprint
- Protected biomes
- Engagement in International environmental conventions

# Social Indicators

## Regulatory Framework

**Human Rights Conventions**
Subsequent to the Universal Declaration of Human Rights, additional agreements, treaties and conventions which regulate the different aspects of civil and economic life have been created by the United Nations.

The status of ratification of the following conventions is verified on an annual basis:

- International Covenant on Economic, Social and Cultural Rights

- International Covenant on Civil and Political Rights
- Optional Protocol to the International Covenant on Civil and Political Rights
- Second Optional Protocol to the International Covenant on Civil and Political Rights, aiming at the abolition of the death penalty
- International Convention on the Elimination of All Forms of Racial Discrimination
- Convention on the Elimination of All Forms of Discrimination against Women
- Optional Protocol to the Convention on the Elimination of Discrimination against Women
- Convention Against Torture
- Convention on the Rights of the Child
- Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography
- Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict
- International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families
- Agreement for facilitating the International Circulation of Visual and Auditory Material of an Educational, Scientific and Cultural Character
- Agreement on the Importation of Educational, Scientific and Cultural Materials
- UNESCO Convention against discrimination in Education

**Labour Rights Conventions**
The ILO (International Labour Organization) has identified standards for the rights of workers, which have been agreed to and applied at the international level. We can find these standards in the ILO Conventions that member states are obliged to sign, ratify and activate.

The status of ratification of the following conventions is verified on an annual basis:

- Freedom of Association and Protection of the Right to Organise Convention
- Right to Organise and Collective Bargaining Convention
- Forced Labour Convention
- Abolition of Forced Labour Convention
- Equal Remuneration Convention

- Discrimination (Employment and Occupation) Convention
- Minimum Age Convention
- Worst Forms of Child Labour Convention

**Controversial Weapons Conventions**
The status of ratification of the following conventions is verified on an annual basis:

- Convention on Cluster Munitions
- Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons
- Chemical Weapons Convention
- Treaty on the Non-Proliferation of Nuclear Weapons

## Implementation

**Death Penalty**
The list of abolitionists and retentionist countries is created and updated on a yearly basis and is based on analysis by Amnesty International.

The classification distinguishes among four categories:

- Abolitionist for all crimes: Countries whose laws do not provide for the death penalty for any crime.
- Abolitionist for ordinary crimes only: Countries whose laws provide for the death penalty only for exceptional crimes such as crimes under military law or crimes committed in exceptional circumstances, such as wartime crimes.
- Abolitionist in practice: Countries that retain the death penalty for ordinary crimes such as murder but can be considered abolitionist in practice in that they have not executed anyone during the past 10 years and are believed to have a policy or established practice of not carrying out executions. The list also includes countries which have made an international commitment not to use the death penalty.
- Retentionist: Countries and territories that retain the death penalty for ordinary crimes.

**Civil Liberties and Political Rights**
The analysis is based on Freedom House Ratings.

Freedom House is a Washington-based international non-governmental organization that conducts research and advocacy on democracy, political freedom and human rights. Support for Freedom House is provided by individuals, but also by the United States government. It publishes an annual report assessing the degree of perceived democratic freedoms in each country, which is used in political science research.

The organization estimates the standard of:

- Civil Liberties: including categories such as freedom of thought and religion, freedom to join trade unions, the presence of a free judicial system, personal freedom, economic freedom (the possibility to create private economic activities)

- Political Rights: including categories such as the presence of free elections, the freedom to form opposition parties and the possibility for ethnic and religious minorities to be represented in the government.

**Military Expenditure**
The list of countries by military expenditure is published by the World Bank on a yearly basis and is based on Stockholm International Peace Research Institute's (SIPRI) Yearbook on Armaments, Disarmament and International Security.

Military expenditure of a country is expressed as a percentage of Gross Domestic Product.

This ratio provides an indication of the level of financial resources devoted to defence in terms of the share of the GDP, at a given point in time.

**Gender Gap Report**
The Report, developed by the World Economic Forum, ranks countries based on the Gender Gap Index, the result of collaboration with faculty at Harvard University and the University of California, Berkeley.

The report's Gender Gap Index ranks countries according to their gender gaps, and their scores can be interpreted as the percentage of the inequality between women and men that has been closed. Information about gender imbalances to the advantage of women is mentioned to be explicitly prevented from affecting the score.

The report examines four critical areas of inequality between men and women:

- Economic participation and opportunity

- Educational attainment

- Political empowerment

- Health and survival

**Fragile States Index - Human Rights**
The Fragile States Index (FSI) is an annual ranking of 178 countries based on the different pressures they face that impact their levels of fragility. The Index is based on The Fund for Peace's proprietary Conflict Assessment System Tool (CAST) analytical approach.

The ***Human Rights and Rule of Law Indicator*** considers the relationship between the state and its population insofar as fundamental human rights are protected and freedoms are observed and respected. The Indicator looks at whether there is widespread abuse of legal, political and social rights, including those of individuals, groups and institutions (e.g. harassment of the press, politicization of the judiciary, internal use of military for political ends, repression of political opponents). The Indicator also considers outbreaks of politically inspired (as opposed to criminal) violence perpetrated against civilians. It also looks at factors such as denial of due process consistent with international norms and practices for political prisoners or dissidents, and whether there is current or emerging authoritarian, dictatorial or military rule in which constitutional and democratic institutions and processes are suspended or manipulated.

**Voice and accountability**
Voice and accountability, estimated by the World Bank, captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

**Human Development Index (HDI)**
The Human Development Index (HDI) was created to emphasize that people and their capabilities should be the ultimate criteria for assessing the development of a country, not economic growth alone.

The HDI is a summary measure of average achievement in key dimensions of human development:

- a long and healthy life,
- being knowledgeable and
- have a decent standard of living.

The health dimension is assessed by life expectancy at birth, the education dimension is measured by mean of years of schooling for adults aged 25 years and more and expected years of schooling for children of school entering age. The standard of living dimension is measured by gross national income per capita.

The scores for the three HDI dimension indices are then aggregated into a composite index using geometric mean.

**KidsRights Index**

- The KidsRights Index is the first and the only global ranking that annually measures how children's rights are respected worldwide and to what extent countries are committed to improving the rights of children.
- The KidsRights Index is an initiative of the KidsRights Foundation, in cooperation with Erasmus University Rotterdam: Erasmus School of Economics and the International Institute of Social Studies. It comprises a ranking of all UN member states that have ratified the UN Convention on the Rights of the Child and for which sufficient data is available, as of 2025 a total of 194 countries are part of the Index.

**Global Innovation Index**

The Global Innovation Index is an annual publication which features, among others, a composite indicator that ranks countries/economies in terms of their enabling environment to innovation and their innovation outputs. The ranking is based on the following pillars: Institutions, Human capital and research, Infrastructure, Market sophistication, Business sophistication, Knowledge and technology outputs, and Creative outputs.

**Global Peace Index**

The Global Peace Index (GPI) is a report produced by the Australia-based NGO Institute for Economics & Peace (IEP) which measures the relative position of nations' and regions' peacefulness.

**Global Health Index**

The GPI ranks 163 independent states and territories (collectively accounting for 99.7 per cent of the world's population) according to their levels of peacefulness. In the past decade, the GPI has presented trends of increased global violence and less peacefulness.

The Global Health Security Index focuses tightly upon a nation's ability to maintain the well-being of its citizens during a pandemic or other extreme biological event. The index evaluates each country by assessing its performance in 37 different indicators, which are then combined to give each country a score between 1-100 in each of six general categories:

- Prevention — Prevention of the emergence or release of pathogens
- Detection and Reporting — Early detection and reporting for epidemics of potential international concern
- Rapid Response — Rapid response to and mitigation of the spread of an epidemic
- Health System — Sufficient and robust health system to treat the sick and protect health workers
- Compliance with International Norms — Compliance with international norms — Commitments to improving national capacity, financing plans to address gaps, and adhering to global norms
- Risk Environment — Overall risk environment and country vulnerability to biological threats.
- These per-category scores are then merged into a single value: the country's overall Global Health Index (GHI) score. That GHI is compared to the GHI of other nations to rank the healthiest (and unhealthiest) countries in the world.

**International Education Database**

The purpose of the international education database is to measure and rank the impact of each nation's education system on its economic and social environment.

The database will also serve as a public center to survey, evaluate, and document the progress of educational goals set as part of the United Nations' Sustainable Development Goal Initiative.

# Governance Indicators

## Regulatory Framework

**Doing Business Report**
The Report, according to a methodology developed by the World Bank, ranks economies based on their ease of doing business. As the ease of doing business is a proxy measure for how much the regulatory environment is conducive to the operation of business, the ranking shows the ability of a country in attracting new business from outside or generating new business internally.

This methodology, by means of a set of indicators, covers areas such as:

- Starting a business
- Dealing with construction permits
- Employing workers
- Registering property
- Getting credit
- Protecting investors
- Paying taxes
- Trading across borders
- Enforcing contracts, and
- Closing a business

The indicators measure business regulation and the protection of property rights—and their effect on businesses, especially small and medium-size domestic firms, according to a process in order to:

1. Document the degree of regulation, such as the number of procedures to start a business or to register and transfer commercial property;
2. Gauge regulatory outcomes, such as the time and cost to enforce a contract, go through bankruptcy or trade across borders;
3. Measure the extent of legal protections of property, for example, the protections of investors against looting by company directors or the range of assets that can be used as collateral according to secured transactions laws;
4. Measure the flexibility of employment regulation;
5. Document the tax burden on businesses.

## Implementation

**Fragile States Index**
The Fragile States Index (FSI) is an annual ranking of 178 countries based on the different pressures they face that impact their levels of fragility. The Index is based on The Fund for Peace's proprietary Conflict Assessment System Tool (CAST) analytical approach.

The ***Uneven Economic Development Indicator*** considers inequality within the economy, irrespective of the actual performance of an economy. For example, the Indicator looks at structural inequality that is based on group (such as racial, ethnic, religious, or other identity group) or based on education, economic status, or region (such as urban-rural divide). The Indicator considers not only actual inequality, but also perceptions of inequality, recognizing that perceptions of economic inequality can fuel grievance as much as real inequality, and can reinforce communal tensions or nationalistic rhetoric. Further to measuring economic inequality, the Indicator also takes into account the opportunities for groups to improve their economic status, such as through access to employment, education, or job training such that even if there is economic inequality present, to what degree it is structural and reinforcing.

The ***Economic Decline Indicator*** considers factors related to economic decline within a country. For example, the Indicator looks at patterns of progressive economic decline of the society as a whole as measured by per capita income, Gross National Product, unemployment rates, inflation, productivity, debt, poverty levels, or business failures. It also considers sudden drops in commodity prices, trade revenue, or foreign investment, and any collapse or devaluation of the national currency. The Economic Decline Indicator further considers the responses to economic conditions and their consequences, such as extreme social hardship imposed by economic austerity programs, or perceived increasing group inequalities. The Economic Decline Indicator is focused on the formal economy – as well as illicit trade, including the drug and human trafficking, and capital flight, or levels of corruption and illicit transactions such as money laundering or embezzlement.

The ***Group Grievance Indicator*** focuses on divisions and schisms between different groups in society – particularly divisions based on social or political characteristics – and their role in access to services or resources, and inclusion in the political process. Group Grievance may also have a historical component, where aggrieved communal groups cite injustices of the past, sometimes going back centuries, that influence and shape that group's role in society and relationships with other groups. This history may in turn be shaped by patterns of real or perceived atrocities or "crimes" committed with apparent impunity against communal groups. Groups may also feel aggrieved because they are denied autonomy, self-determination, or political independence to which they believe they are entitled. The Indicator also considers where specific groups are singled out by state authorities, or by dominant groups, for persecution or repression, or where there is public scapegoating of groups believed to have acquired wealth, status or power "illegitimately", which may manifest itself in the emergence of fiery rhetoric, such as through "hate" radio, pamphleteering, and stereotypical or nationalistic political speech.

The ***State Legitimacy Indicator*** considers the representativeness and openness of government and its relationship with its citizenry. The Indicator looks at the population's level of confidence in state institutions and processes, and assesses the effects where that confidence is absent, manifested through mass public demonstrations, sustained civil disobedience, or the rise of armed insurgencies.

Though the State Legitimacy indicator does not necessarily make a judgment on democratic governance, it does consider the integrity of elections where they take place (such as flawed or boycotted elections), the nature of political transitions, and where there is an absence of democratic elections, the degree to which the government is representative of the population of which it governs. The Indicator takes into account openness of government, specifically the openness of ruling elites to transparency, accountability and political representation, or conversely the levels of corruption, profiteering, and marginalizing, persecuting, or otherwise excluding opposition groups. The Indicator also considers the ability of a state to exercise basic functions that infer a population's confidence in its government and institutions, such as through the ability to collect taxes.

**Index of Economic Freedom**
The Index, developed by the Heritage Foundation, includes a series of economic indicators that measure the economic success of countries around the world.

Studies demonstrate the presence of a relationship between economic freedom and positive social and economic values such as per capita income, economic growth rates, human development, democracy, the elimination of poverty, and environmental protection.

**Corruption Perception Index**
The Index, developed by Transparency International, ranks countries according to their perceived levels of corruption, as determined by expert assessments and opinion surveys.

Since 1995, Transparency International has published annually the Corruption Perceptions Index ordering the countries of the world according to "the degree to which corruption is perceived to exist among public officials and politicians". The organization defines corruption as "the abuse of entrusted power for private gain".

**Democracy Index**
The index, developed by the Economist Intelligence Unit, measures the state of democracy in Countries based on five general categories:

- Electoral process and pluralism
- Civil liberties
- Functioning of government
- Political participation and
- Political culture

**Government Effectiveness**
Government Effectiveness, estimated by the World Bank, captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

**Regulatory Quality**

Regulatory Quality, estimated by the World Bank, captures perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

**Rule of Law**
Rule of Law, estimated by the World Bank, captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

**Political Stability and Absence of Violence/Terrorism**
Political Stability and Absence of Violence/Terrorism, estimated by the World Bank, measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.

# Agencies and Local Authorities Screening Methodology

## Agencies and Supranationals

Agencies and Supranational bonds are issued by organizations which promote cooperation projects in developing countries and/or local or regional integration projects.

Such institutions should support the local economies and/or promote social welfare programs such as housing projects and education.

Such institutions should have a social goal and work towards promoting a sustainable development. Examples are the Inter-American Development Bank, the International Bank for Reconstruction and Development, and Corporación Andina de Fomento. The screening process favours Agencies and Supranationals acting for the well-being of developing countries and for the development of local communities.

The screening assesses the potential involvement in controversial situations such as episodes of corruption, mismanagement of public goods or properties, violation of human rights, respect of civil liberties, and political rights.

## Local Authorities and Municipalities

The screening process is applied also to Local Authorities, such as partially self-governing states, regions, cities, provinces, and municipalities (e.g. Land Schleswig-Holstein, Region of Campania, City of Milan etc.).

The screening assesses the potential involvement of the Local Authority in controversial situations such as episodes of corruption, mismanagement of public goods or properties, violation of human rights, respect of civil liberties and political rights, and adoption of the death penalty.

The final assessment is influenced by the rating of the country where the local authority is based and operates.

# Information Sources

Sovereign analyses draw on a range of reliable and publicly available sources, referenced in the section "ESG Categories and Indicators", to create a transferable, equitable, and auditable approach. Data is not sourced from sustainability statements required under Directive 2013/34/EU or from information disclosed under Regulation (EU) 2019/2088.

**Sources Include:**

- International Treaties and Conventions aimed at the protection of the Environment, Human Rights, Labour Rights, Non-Proliferation, etc.
- Indices and Assessments issued by internationally recognized organizations aimed at measuring countries performance on topics such as Environmental Protection and Enhancement, Civil Liberties and Political Rights, Death Penalty, Corruption, etc.

# Use of Estimated Data

The ECPI Sovereign Bond ESG Rating methodology does not rely on estimated data, modelling techniques, or proxy values. Inputs are derived from publicly available information and third-party datasets published by recognized international organizations, institutions, and research providers.

# Update Cycle

Ratings are considered valid until their next update. Ratings are generally reviewed on an annual basis. In addition to these scheduled updates, additional updates may be conducted when material events occur that are expected to significantly affect the ESG profile of a sovereign issuer, including:

a) Significant changes in political stability, governance quality, institutional effectiveness, or rule of law.

b) Major regulatory, constitutional, or policy reforms with a material impact on ESG-related indicators.

c) Severe environmental events, such as natural disasters, climate-related crises, or major environmental incidents with long-term economic or social consequences.

d) Significant deterioration or improvement in human rights, civil liberties, labour standards, or social cohesion.

e) Material changes in corruption perception, transparency, accountability, or public sector integrity indicators.

f) Armed conflicts, geopolitical crises, sanctions, or major security events affecting the sovereign's governance or sustainability profile.

g) Substantial revisions, corrections, or newly available information from official sources used in the rating process.

h) Extraordinary economic or public health events that may have a significant impact on the sovereign's environmental, social, or governance performance.

In such circumstances, an unscheduled review may be initiated to determine whether the existing rating continues to accurately reflect the sovereign issuer's ESG risk and sustainability profile.

# Limitations

The ECPI Sovereign Bond ESG Rating methodology, data collection, and research process may be subject to certain limitations. The below outlines possible limitations as well as action taken to address them:

**Limitation in Availability or Consistency of Data Sources**

- Lack of Standardization in Data Sources: Data is often disclosed using different formats, definitions, and levels of detail. This lack of standardization in the breadth and depth of disclosures and other data sources poses a certain risk of interpretation errors and requires additional effort to vet data collection and assessment.

**Limitations in the Completeness, Timeliness, and Accuracy of Information**

- Reliance on public and third-party sources: Data collection is inherently constrained by the quality, completeness, and accessibility of public sources. Public disclosures can be outdated, delayed, selectively detailed, spread across multiple documents, or released at different times, potentially leading to discrepancies in data collection.

**Limitations in the use of Assumptions, Proxy Reference Points, and Data Estimation**

- Only public and third-party data is considered in the assessment and no assumptions or estimations are made. No proxy reference points are considered.

# Quality Assurance

- The quality of the assessments is ensured by a rule-based approach, thereby reducing analyst's discretionary reading of the assessed dimension.

- The quality of the assessment is also ensured by a two-tier validation mechanism (maker-checker).

# Methodology Review Process

The ECPI Sovereign Bond ESG Rating methodology is subject to at least annual review and may be updated more frequently where required due to regulatory developments, methodological enhancements, data availability considerations, or evolving market practices.

# Appendix

## Appendix A: Version Control

**Name of Methodology:** ECPI Sovereign Bond ESG Rating

| VERSION | DATE | DETAILS |
|---|---|---|
| **1.9.0** | April 2024 | Publication of the ECPI Sovereign Bond ESG Rating Methodology and Research Process document |
| **2.0** | July 2026 | Inclusion of the Public Disclosure on the Methodology, Models, and Key Rating Assumptions Used in ESG Rating Activities (as defined by the Regulation (EU) 2024/3005) |

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