

## **INDEX DOCUMENT**

# **ESG REPORT DISCLOSURES DEFINITIONS**

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## About this document

This document provides technical information of the metrics part of the *ESG Report* that is published by Euronext at :

<https://live.euronext.com/en/products/indices/all-indices-documents>

This document provides information on the metrics and how it is constructed for the *ESG Report*.

These disclosures are designed to align with the requirements of the EU Benchmark Regulation. Moreover, additional metrics have been added in relation to the requirements of the Sustainable Finance Disclosure Regulation (SFDR), including additional metrics and Taxonomy metrics.

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# 1. COMBINED ESG FACTORS

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## 1.1 ESG SCORE

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a numeric score from 1 (D-), to 4 (A+), linked to the rated entity's overall rating based on an assessment of environmental, social, and governance performance.

**Formula:** Weighted average score, the result is expressed in value ranging 1 to 4, where higher is better.

$$\sum_{i=1} \frac{ESGRatingOverallNumeric(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

ESGRatingOverallNumeric (i) = ESG score of constituent i

W(i) = index constituent weight for equity i

i = index constituent with an ESGRatingOverallNumeric

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## 1.2 EU TAXONOMY ALIGNMENT

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### 1.2.1 EU Taxonomy Alignment Report

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:**

The EU Taxonomy Alignment report evaluates a portfolio's levels of alignment against the six climate and environmental related objectives set out by the regulatory text, by determining investee companies' involvement in Taxonomy eligible economic activities, quantifying the respective revenues from these activities, and subsequently applying the three technical assessment steps of Substantial Contribution, Do No Significant Harm, and Minimum Social Safeguards.

The Taxonomy Regulation requires investors to report the proportion of underlying investments which are taxonomy-aligned. To facilitate this type of reporting, alignment results are provided for each taxonomy-eligible activity a company has been identified to be involved in, based on which an overall alignment result is calculated for each company. The activity-level alignment result is derived from the results of the three alignment checks conducted as part of the assessment process: checking alignment with screening criteria for Substantial Contribution (SC), ensuring Do No Significant Harm (DNSH) criteria are met, and verifying lack of controversies (or allegations of such) relating to the Minimum Social Safeguards (MSS).

Revenue generated through each eligible activity is added to the respective categories based on the alignment result, reflecting the level of confidence and scope of alignment: Aligned, Likely Aligned (100%), Likely Aligned (>20%), Potentially Aligned (100%), Potentially Aligned (20%), Likely Not Aligned, and Not Aligned. Where we do not have sufficient data to

conduct an overall EU Taxonomy alignment assessment the respective revenue is not be added to any of the alignment categories. Based on these activity-level results, total revenue shares falling into respective alignment category are calculated for each company. All remaining revenue is not eligible and summed up under Total Not Eligible Revenue.

The share of revenue per each alignment category is also broken down by Taxonomy objective and into Green, Enabling, and Transition, reflecting categorization adopted in the Taxonomy Regulation. For the purpose of calculating revenue shares per alignment category across all objectives, where an activity is assessed for a potential significant contribution to more than one taxonomy objective, the respective revenue is counted only once and attributed to the most favourable alignment category. Alignment results are aggregated at the portfolio level, summing up the revenue shares for each overall alignment category from the underlying constituents. Revenue broken down by objective and into Green, Enabling, and Transition is also aggregated at the portfolio level. All revenue factors are provided in weighted average percentage of revenue of portfolio constituents.

ISS ESG enhancements to its EU Taxonomy Alignment solution targeted for release in mid-December 2022 : the taxonomy solution includes directly reported data, this enhancement includes approximately 2,000 reporting companies. When a company reports data for eligibility or alignment or both, then, only reported data will be displayed across all datapoints. For directly reported data, since reporting templates do not require the disclosure of aggregated results broken down by objective and contribution type, ISS ESG relies on activity level data reported by the company to calculate these factors. Therefore, if a company reports only at entity level and not at the activity level, these factors will show values of 0%. As a result, the values for Green/Enabling/Transition or Mitigation/Adaptation factors may not always add up to the respective Overall values.

ISS ESG provide the percentage value of revenue derived from activities that are eligible under the Taxonomy across all Taxonomy objectives. For aggregated issuers, including funds, this factor provides a weighted average value based on the performance of holdings.

From the eligible revenue, ISS ESG provides the breakdown of EU Taxonomy Alignment by :

- Green : This factor identifies the percentage value of revenue derived from activities that are eligible under the Taxonomy and defined as green or 'near zero' across all Taxonomy objectives.
- Enabling : This factor identifies the percentage value of revenue derived from activities that are eligible under the Taxonomy and defined as enabling across all Taxonomy objectives.
- Transition : This factor identifies the percentage value of revenue derived from activities that are eligible under the Taxonomy and defined as transition across all Taxonomy objectives.
- Overall : This factor identifies the percentage value of revenue derived from activities that are eligible under the Taxonomy across all Taxonomy objectives.

ISS ESG have defined the following Taxonomy revenue level :

- Eligible Revenue : This factor identifies the percentage value of revenue derived from activities that are eligible under the Taxonomy across all Taxonomy objectives.
- Not Eligible Revenue : This factor identifies the percentage value of revenue derived from activities determined to be Not Eligible in relation to Taxonomy-aligned activities across all Taxonomy objectives.
- Aligned : This factor identifies the percentage value of revenue derived from activities that are Taxonomy-aligned across all Taxonomy objectives.

- Likely Aligned : This factor identifies the percentage value of revenue derived from activities that are likely Taxonomy-aligned across all Taxonomy objectives.
- Potentially Aligned : This factor identifies the percentage value of revenue derived from activities that are potentially Taxonomy-aligned across all Taxonomy objectives.
- Likely Not aligned : This factor identifies the percentage value of revenue derived from activities that are likely not Taxonomy-aligned across all Taxonomy objectives.
- Not Aligned : This factor identifies the percentage value of revenue derived from activities that are not Taxonomy-aligned across all Taxonomy objectives.

**The six environmental objectives**

- Climate change mitigation
- Climate change adaptation
- The sustainable use and protection of water and marine resources
- The transition to a circular economy
- Pollution prevention and control
- The protection and restoration of biodiversity and ecosystems

**EU Taxonomy Alignment Revenue**

**Formula:** Weighted average revenue, the result is expressed as a percentage.

**Top Eligible Activities of the Index**

This chart displays the eligible activities that the portfolio derives the most revenue from.

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**1.2.2 NFRD Flag**

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer fulfils relevant criteria for falling under the reporting requirements of the European Union's Non-Financial Reporting Directive, including the country of incorporation, stock exchange, number of employees, issuer revenue and sector classification.

**Formula:**

- Aggregate index weight of companies with a true value, the result is expressed in percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i  
i = index constituent with a NFRDFlag flagged True

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### 1.3 EU SFDR : PRINCIPAL ADVERSE SUSTAINABILITY IMPACTS

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

This ESG report draws on ISS ESG's SFDR Principal Adverse Impact Solution, which includes data on corporate as well as sovereign and supra-national issuers in line with the mandatory as well as additional SFDR Principal Adverse Impact (PAI) indicators. ISS ESG's SFDR Principal Adverse Impact Solution builds on a variety of ISS ESG research products, leveraging justifiable proxies in the absence of reported and disclosed data. Portfolio-level metrics are calculated in accordance with the specifications of the draft Regulatory Technical Standards (RTS) published by the European Supervisory Authorities (ESAs).

For the purpose of calculating portfolio-level metrics, only those positions for which data is available are considered. The share of covered positions per PAI indicator is displayed in the "coverage" column. Corporate Ratings, leveraged in the SFDR PAI Solution, applies an industry-specific approach, designed to measure only the most material ESG issues for each industry. Coverage may therefore be lower for some PAI indicators, as they are not considered material for all industries.

When calculating the share of non-renewable energy consumption, energy and water use intensity, emissions to air and water, waste ratios and rates of accidents, only company-reported data is considered. Moreover, only companies reporting the respective data on a group-wide basis (i.e. for at least 80% of relevant operations) are considered to have data; non-group wide data is considered non-representative and thus not used. For other quantitative metrics, including GHG emissions and non-renewable energy production, data is estimated/modelled in the absence of trustworthy company disclosure.

The PAI indicators displayed in this report can have different reference timeframes: point in time assessments (e.g. share of investee companies with certain characteristics), or outcomes over a given time period (e.g. average emission intensity is calculated for a fiscal year). Point in time assessments are always based on the most current data available within ISS ESG's data sets. All factors which provide data on outcomes over a fiscal year refer to the same fiscal year at any point in time. Data is rolled over on 31 December of each year.



## 2. ENVIRONMENTAL FACTORS

### 2.1 ENVIRONMENTAL SCORE

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a numeric score from 1 (D-), being poor, to 4 (A+), being high, linked to the rated entity's Environmental rating. The Environmental rating is based on an assessment of performance across key environmental metrics including energy management, water risk and impact, waste management, eco-efficiency, sector specific environmental aspects along the value chain, and other issues.

**Formula:** Weighted average score, the result is expressed in value ranging 1 to 4, where higher is better.

$$\sum_{i=1} \frac{\text{EnvRatingNumeric}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:  
EnvRatingNumeric (i) = Environmental score of constituent i  
W(i) = index constituent weight for equity i  
i = index constituent with an EnvRatingNumeric

### 2.2 CLIMATE-RELATED PHYSICAL RISKS

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** The aim of a climate-related physical risk analysis is to understand a company’s future exposure to climate change-induced natural catastrophes, for example through increases in tropical cyclones or wildfires. The analysis provided by ISS ESG gives the investor knowledge on company risk exposure and the climate risk awareness of the companies analysed.

The assessment covers five of the most costly physical climate hazards across three scenarios, historical, most likely, and worst case. Granular corporate data is used to understand an issuer’s geographical activity profile and thereby its hazard exposure. Proprietary financial data is used to assess the Value at Risk from hazards on a granular basis, including not only owned but also rented and leased assets for a holistic analysis.

The ESG physical risk solution provides metrics on both corporate and portfolio level. The factors show the financial impact on companies of individual hazards through Physical Risk Scores. Underlying factors that provide more granular details on how companies are affected by physical risks are also analysed. The key factors provided are:

- Physical risk score per hazard and scenario
- Value at Risk per hazard and scenario
- Management score for overall physical climate risk management

The score is expressed on a scale 0-100 where a low score indicates high risk, and a high score indicates low risk.

**Formula:** Weighted average score, the rating is expressed by a value ranging from 0 to 100, where higher is better.

$$\sum_{i=1} \frac{\text{ClimatePhysRiskScoreTotalLkly}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:  
 ClimatePhysRiskScoreTotalLkly(i) = Physical Risk Score of constituent i  
 W(i) = index constituent weight for equity i  
 i = index constituent with a ClimatePhysRiskScoreTotalLkly

### 2.3 HIGH CLIMATE IMPACT SECTORS EXPOSURE (NACE)

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Degree of exposure of the portfolio to the NACE sectors Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006 of the European Parliament and of the Council.<sup>1</sup> This list of sectors is including the oil, gas, mining and transportation sectors, are sectors that highly contribute to climate change.

Section	Section Name
A	AGRICULTURE, FORESTRY AND FISHING
B	MINING AND QUARRYING
C	MANUFACTURING
D	ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY
E	WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES
F	CONSTRUCTION
G	WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES
H	TRANSPORTATION AND STORAGE
L	REAL ESTATE ACTIVITIES

**Formula:** Aggregate index weight of companies with a NACE sectors Sections A to H and Section L, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:  
 W(i) = index constituent weight for equity i  
 i = index constituent with a NACECodeNumber Sections A to H and Section L

<sup>1</sup> <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32006R1893>

### 2.4 GREENHOUSE GAS (GHG) INTENSITY (SCOPE 1 & 2 PER MILLION EUR OF REVENUE)

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** The Greenhouse gas (GHG) intensity (Scope 1 & 2) of the benchmark is expressed as a weighted average. This factor identifies the issuer's total Scope 1 + Scope 2 carbon emissions intensity. The carbon intensity is expressed as the issuer's total carbon emissions per million EUR of revenue as a proxy of the carbon efficiency per unit of output. Global coverage extends over a universe of 25,000+ listed companies and issuers of corporate debt.

**Formula:** Weighted average GHG intensity, the result is expressed in tons of CO<sub>2</sub>e per million EUR of revenue per year.

$$\sum_{i=1} \frac{\text{ClimateTotalEmissionsIntEUR}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

ClimateTotalEmissionsIntEUR(i) = Greenhouse gas emission in tons of CO<sub>2</sub>e per million EUR of revenue per year of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a ClimateTotalEmissionsIntEUR

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## 2.5 GREENHOUSE GAS (GHG) EMISSIONS - SCOPE 1 DIRECT EMISSIONS (EVIC)

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides the issuer's Scope 1 Direct emissions per million EUR EVIC. The direct emissions data represents final, ISS ESG reviewed and approved value based on the ISS ESG methodology, which selects the most accurate value from available sources. In this instance, EVIC is calculated as follows: Market Cap + Total Debt + Minority Interest + Value of Preferred Shares. For funds and other aggregated issuers, the value is based on the aggregation of owned emissions per holding.

**Formula:** Weighted average GHG emissions Scope 1, the result is expressed in tons of CO<sub>2</sub>e per million EUR EVIC per year.

$$\sum_{i=1} \frac{\text{ClimateScope1EmissionsEV}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

ClimateScope1EmissionsEV (i) = Greenhouse gas emission Scope 1 in tons of CO<sub>2</sub>e per million EUR EVIC per year of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a ClimateScope1EmissionsEV

---

## 2.6 GREENHOUSE GAS (GHG) EMISSIONS - SCOPE 2 ENERGY INDIRECT EMISSIONS (EVIC)

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides the issuer's Scope 2 Energy Indirect emissions per million EUR EVIC. The direct emissions data represents final, ISS ESG reviewed and approved value based on the ISS ESG methodology, which selects the most accurate value from available sources. In this instance, EVIC is calculated as follows: Market Cap + Total Debt + Minority Interest + Value of Preferred Shares. For funds and other aggregated issuers, the value is based on the aggregation of owned emissions per holding.

**Formula:** Weighted average GHG emissions Scope 2, the result is expressed in tons of CO<sub>2</sub>e per million EUR EVIC per year.

$$\sum_{i=1} \frac{\text{ClimateScope2EmissionsEV}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

ClimateScope2EmissionsEV (i) = Greenhouse gas emission Scope 2 in tons of CO<sub>2</sub>e per million EUR EVIC per year of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a ClimateScope2EmissionsEV

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## 2.7 GREENHOUSE GAS (GHG) EMISSIONS - SCOPE 3 "OTHER INDIRECT" EMISSIONS (EVIC)

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides the issuer's Scope 3 "Other Indirect" emissions per million EUR EVIC. The direct emissions data represents final, ISS ESG reviewed and approved value based on the ISS ESG methodology, which selects the most accurate value from available sources. In this instance, EVIC is calculated as follows: Market Cap + Total Debt + Minority Interest + Value of Preferred Shares. For funds and other aggregated issuers, the value is based on the aggregation of owned emissions per holding.

**Formula:** Weighted average GHG emissions Scope 3, the result is expressed in tons of CO<sub>2</sub>e per million EUR EVIC per year.

$$\sum_{i=1} \frac{\text{ClimateScope3EmissionsEV}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

ClimateScope3EmissionsEV (i) = Greenhouse gas emission Scope 3 in tons of CO<sub>2</sub>e per million EUR EVIC per year of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a ClimateScope3EmissionsEV

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## 2.8 GREENHOUSE GAS (GHG) EMISSIONS - SCOPE 1 + 2 + 3 (EVIC) – CARBON FOOTPRINT

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides the issuer's aggregated emissions from Scopes 1, 2, and 3 per million EUR EVIC. The emissions data represents final, ISS ESG reviewed and approved value based on the ISS ESG methodology, which selects the most accurate value from available sources. In this instance, EVIC is calculated as follows: Market Cap + Total Debt + Minority Interest + Value of Preferred Shares. For funds and other aggregated issuers, the value is based on the aggregation of owned emissions per holding.

**Formula:** Weighted average GHG emissions Scope 1+2+3, the result is expressed in tons of CO<sub>2</sub>e per million EUR EVIC per year.

$$\sum_{i=1} \frac{\text{ClimateScope123EmissionsEV}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

ClimateScope123EmissionsEV (i) = Greenhouse gas emission Scope 1+2+3 in tons of CO<sub>2</sub>e per million EUR EVIC per year of constituent i

W(i) = index constituent weight for equity i

$i$  = index constituent with a ClimateScope123EmissionsEV

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## 2.9 PERCENTAGE OF GHG EMISSIONS REPORTED VERSUS ESTIMATED

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor identifies the data resource used for the Total Emissions value. Reported data includes information derived from Sustainability or Annual Reports, CDP disclosures, or other verified resources. The "Modelled Emissions" value identifies issuers where ISS estimated emissions models to generate emissions data, either because the issuer does not report emissions or an issuer's reported emissions data does not meet quality standards.

**Formula:** Aggregate index weight of companies with GHG emissions reported, expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

$W(i)$  = index constituent weight for equity  $i$

$i$  = index constituent with a ClimateCNI EmissionsSource with emissions reported

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## 2.10 ESTIMATED EMISSIONS - ESTIMATION TRUST SCORE

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a numeric value that shows the explanatory power of the model used to estimate Scope 1 & 2 emissions for the company. A higher value conveys a stronger level of accuracy in estimated emissions data.

**Formula:** Weighted Estimation Trust Score

$$\sum_{i=1} \frac{\text{ClimateEmissionsEstimatedTrust}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

$\text{ClimateEmissionsEstimatedTrust}(i)$  = Estimation Trust Score of constituent  $i$

$W(i)$  = index constituent weight for equity  $i$

---

## 2.11 FOSSIL FUEL-BASED SECTOR EXPOSURE (NACE)

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Exposure of the benchmark portfolio to companies the activities of which fall under NACE Divisions 5 to 9, 19 and 20 of Annex I to Regulation (EC) No 1893/2006<sup>2</sup>,

including Mining of coal and manufacture of chemicals, are sectors that highly contribute to climate change.

Division	Division Name
5	Mining of coal and lignite
6	Extraction of crude petroleum and natural gas
7	Mining of metal ores
8	Other mining and quarrying
9	Mining support service activities
19	Manufacture of coke and refined petroleum products
20	Manufacture of chemicals and chemical products

**Formula:** Aggregate index weight of companies with a NACE Divisions 05 to 09, 19 and 20, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a NACECodeNumber Divisions 5 to 9, 19 and 20

<sup>2</sup> <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32006R1893>

## 2.12 EXPOSURE OF THE BENCHMARK PORTFOLIO TO ACTIVITIES INCLUDED IN THE ENVIRONMENTAL GOODS AND SERVICES SECTOR

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Exposure of the benchmark portfolio to activities included in the environmental goods and services sector, as defined in Article 2, point (5) of Regulation (EU) No 691/2011 of the European Parliament and of the Council.<sup>3</sup> ISS uses Environmental goods and services (BMR): This factor identifies the % of total revenue derived from activities included in the environmental goods and services sector.

**Formula:** Weighted average revenue share derived from activities included in the environmental goods and services sector, the result is expressed as a percentage.

$$\sum_{i=1} \frac{\text{EnvGoodsAndServPercentBMR}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

EnvGoodsAndServPercentBMR(i) = % of total revenue derived from activities included in the environmental goods and services sector for equity i

W(i) = index constituent weight for equity i

i = index constituent with an EnvGoodsAndServPercentBMR

<sup>3</sup> <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32011R0691>

## 2.13 EXPOSURE TO COMPANIES ACTIVE IN FOSSIL FUEL SECTOR

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer is involved in the fossil fuel sector. The assessment of whether the issuer is involved in the fossil fuel sector is based on ISS ESG's Energy & Extractives screen, which identifies issuers deriving revenue from the production or distribution of coal, oil, or gas and unconventional practices.

**Formula:**

- Aggregate index weight of companies with an involvement in the fossil fuel sector, the result is expressed in percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a FossilFuelInvolvementPAI flagged True

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## 2.14 SHARE OF NON-RENEWABLE ENERGY CONSUMPTION AND PRODUCTION

### Share of non-renewable energy consumption

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Non-renewable Energy Consumption: This factor identifies the issuer's consumption of energy generated from non-renewable sources, as well as energy consumption from biomass. Where the source of energy is unclear, it will also be included in this factor. For funds and other aggregated issuers, the value is based on a weighted average of holdings with exposure.

**Proxy Justification:** This ISS ESG factor encompasses energy consumption from non-renewable energy sources, excluding natural gas; any energy use figures where the source of energy is unclear is also included in this factor.

**Formula:** Weighted average energy consumption generated from non-renewable sources, the result is expressed in percentage.

$$\sum_{i=1} \frac{NonRenewableEnergyConsumption(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

NonRenewableEnergyConsumption(i) = percentage of energy consumption generated from non-renewable sources of constituent i

W(i) = index constituent weight for equity i

i = index constituent with an NonRenewableEnergyConsumption

### Share of non-renewable energy production

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Non-renewable Energy Production: This factor identifies the percent of total electricity a generator produces from non-renewable energy sources (fossil fuel and nuclear)

over a specific period of time. For funds and other aggregated issuers, the value is based on a weighted average of holdings with exposure.

**Formula:** Weighted average energy production generated from non-renewable sources, the result is expressed in percentage.

$$\sum_{i=1} \frac{NonRenewableEnergyProduction(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

NonRenewableEnergyProduction(i) = percentage of energy production generated from non-renewable sources of constituent i

W(i) = index constituent weight for equity i

i = index constituent with an NonRenewableEnergyProduction

**Share of energy sources used – Coal, nuclear and unclear energy sources**

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor evaluates the sources of energy used by the company, indicating the percentage of coal, nuclear, oil or unclear energy sources. This factor includes nuclear power, coal and similar energy sources, including thermal or steaming coal, lignite, peat, petroleum coke, coal gas, fuel oil, gasoline, diesel, kerosene, hazardous waste fraction, shale oil, and synthetic crude oil.

**Formula:** Weighted average percentage of from coal, nuclear and unclear energy sources of all energy sources, the result is expressed in percentage.

$$\sum_{i=1} \frac{CRPerEnergyUseCoalUncl(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

CRPerEnergyUseCoalUncl (i) = percentage of energy used from coal, nuclear and unclear energy sources of all energy sources of constituent i

W(i) = index constituent weight for equity i

i = index constituent with an CRPerEnergyUseCoalUncl

**Share of energy sources used – Natural gas, waste-to-energy and biomass**

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor evaluates the sources of energy used by the company, indicating the percentage of natural gas, waste-to-energy and biomass of all energy sources. This factor includes natural gas or methane, liquified natural gas (LNG), liquified petroleum gas (LPG), compressed natural gas (CNG), and natural gas liquid (NGL). The factor further encompasses waste-to-energy, i.e. waste incineration, biomass from biogas- and/or biomass-fired powerplants, wood, and biofuels (e.g. bioethanol or biodiesel).

**Formula:** Weighted average percentage of natural gas, waste-to-energy and biomass of all energy sources, the result is expressed in percentage.

$$\sum_{i=1} \frac{CRPerEnergyUseNatGas(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

CRPerEnergyUseNatGas(i) = percentage of energy used from natural gas, waste-to-energy and biomass of all energy sources of constituent i

W(i) = index constituent weight for equity i

i = index constituent with an CRPerEnergyUseNatGas



**2.15 ENERGY CONSUMPTION INTENSITY**

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor indicates the issuer's energy consumption in GWh per million EUR of revenue (GWh/mEUR).

**Formula:** Weighted average energy consumption, the result is expressed in GWh per million EUR of revenue.

$$\sum_{i=1} \frac{EnergyConsumptionIntensity(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:  
 EnergyConsumptionIntensity(i) = Energy consumption in GWh per million EUR of revenue of constituent i  
 W(i) = index constituent weight for equity i  
 i = index constituent with an EnergyConsumptionIntensity

**2.16 ENERGY CONSUMPTION INTENSITY PER HIGH IMPACT CLIMATE SECTOR (NACE)**

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Weighted average energy consumption, the result is expressed in GWh per million EUR of revenue per NACE sectors Sections A to H and Section L

Section	Section Name
A	AGRICULTURE, FORESTRY AND FISHING
B	MINING AND QUARRYING
C	MANUFACTURING
D	ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY
E	WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES
F	CONSTRUCTION
G	WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES
H	TRANSPORTATION AND STORAGE
L	REAL ESTATE ACTIVITIES

**Formula:** Weighted average energy consumption, the result is expressed in GWh per million EUR of revenue.

$$\sum_{i=1} \frac{EnergyConsumptionIntensity(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:  
 EnergyConsumptionIntensity(i) = Energy consumption in GWh per million EUR of revenue of constituent I per NACE sectors Sections A to H and Section L  
 W(i) = index constituent weight for equity I per NACE sectors Sections A to H and Section L  
 i = index constituent with an EnergyConsumptionIntensity

### 2.17 ACTIVITIES NEGATIVELY AFFECTING BIODIVERSITY SENSITIVE AREAS

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Companies Negatively Affecting Biodiversity-sensitive Areas: This factor provides a T/F indication of whether the issuer is directly involved in controversies which negatively affect biodiversity-sensitive areas and where remedial measures have not been implemented. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Proxy Justification:** ISS ESG links controversies to some, but not all, of the standards referenced in the PAI definition of 'activities negatively affecting biodiversity-sensitive areas'. However, the standards/directives referenced in the regulation overlap with those applied in the proxy to a large extent.

**Formula:**

- Aggregate index weight of companies with an involvement in controversies which negatively affect biodiversity-sensitive areas and where remedial measures have not been implemented, the result is expressed in percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a CompNegAffectBioSensAreas flagged True

### 2.18 EMISSIONS TO WATER

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** COD Emissions EVIC: This factor assesses the chemical oxygen demand (COD) emission of a company. Chemical oxygen demand is used to measure chemical emissions into (waste) water. The unit for this factor is: tonnes (t) per million EUR of Enterprise Value Including Cash (EVIC).

**Proxy Justification:** The PAI indicator refers to various types of emissions to water. ISS ESG collects chemical oxygen demand (COD), a commonly used indicator measuring emissions to water which can serve as a proxy to the PAI indicator's requirements. ISS ESG collects data only for companies in most relevant industries.

**Formula:** Weighted average tonnes of COD emissions, the result is expressed in tonnes of COD emissions per million EUR of EVIC.

$$\sum_{i=1} \frac{\text{CRCODEmissionsEVIC}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

CRCODEmissionsEVIC(i) = tonnes of COD emissions per million EUR of EVIC of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a CRCODEmissionsEVIC

### 2.19 HAZARDOUS WASTE RATIO

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor assesses the total hazardous waste generated by a company as opposed to waste sent to landfill. As hazardous waste generation differs across sectors, comparability across sectors should be applied with care. For instance, hazardous waste in Health Care Facilities & Services usually refers to medical waste, which is delicate but generally light, while in Metals & Mining it refers to much heavier tailings. The unit for this factor is: in tons (t) per million EUR of Enterprise Value Including Cash (EVIC).

**Proxy Justification:** ISS ESG collects company reported hazardous waste, relying on companies' own definitions, which may differ from the definition adopted in the regulation. Radioactive waste may or may not be included as a sub-sector of hazardous waste.

**Formula:** Weighted average hazardous waste generated, the result is expressed in tons per million EUR of EVIC.

$$\sum_{i=1} \frac{\text{CRHazardousWasteEVIC}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

CRHazardousWasteEVIC(i) = Hazardous waste generated of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a CRHazardousWasteEVIC

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## 2.20 EMISSIONS OF AIR POLLUTANTS

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor assesses the total emissions of nitrogen oxide (NOx), sulfur oxide (SOx), volatile organic compound (VOC), and/or particulate matter of the issuer collected by ISS ESG. Emissions from the issuer's products during use-phase are not included. ISS ESG collects data on emissions which are most relevant to the respective industries. Data is presented in Metric tonnes (t). For funds and other aggregated issuers, the value is based on a weighted average of holdings with exposure. The unit for this factor is: metric tonnes (t) per million EUR of Enterprise Value Including Cash (EVIC).

**Proxy Justification:** ISS ESG collects data only for companies in most relevant industries, covering most, but not all, types of emissions referred to in the PAI definition. Issuers fall within the scope of data collection for Total air emissions (Metric Tonnes) per Mio EUR EVIC if they are in ISS ESG's Corporate Rating universe and designated as any one of the following ESG Rating Industries: (Chemicals) OR (Coal & Consumable Fuels) OR (Construction Materials) OR (Electric Utilities) OR (Gas and Electricity Network Operators) OR (Industrial Conglomerates) OR (Integrated Oil & Gas) OR (Metals Processing & Production) OR (Mining & Integrated Production) OR (Multi-Utilities) OR (Oil & Gas Equipment/Services) OR (Oil & Gas Exploration & Production) OR (Oil & Gas Refining & Marketing) OR (Oil & Gas Storage & Pipelines) OR (Packaging) OR (Paper & Forest Products) OR (Renewable Electricity) OR (Trading Companies & Distributors) OR (Water and Waste Utilities) OR (Semiconductors).

**Formula:** Weighted average tonnes of nitrogen oxide (NOx), sulfur oxide (SOx), volatile organic compound (VOC), and/or particulate matter of the issuer collected by ISS ESG, the result is expressed in metric tonnes per million EUR of EVIC.

$$\sum_{i=1} \frac{\text{TotalAirEmissionsEVIC}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

TotalAirEmissionsEVIC(i) = tonnes of nitrogen oxide (NOx), sulfur oxide (SOx), volatile organic compound (VOC), and others, per million EUR of Enterprise Value Including Cash (EVIC) of constituent i

W(i) = index constituent weight for equity i

i = index constituent with an TotalAirEmissionsEVIC

### 2.21 COMPANIES WITHOUT CARBON EMISSION REDUCTION INITIATIVES

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer lacks science-based greenhouse gas emissions reduction targets. The factor will identify companies as lacking carbon emission reduction initiatives (T) if they have not set themselves carbon emission reduction targets approved by the Science-Based Targets Initiatives or are formally committed to do so. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Proxy Justification:** For the purpose of this PAI indicator, ISS ESG considers companies to have carbon emission reduction initiatives aimed at aligning with the Paris Agreement only if they have set themselves or are formally committed to setting themselves carbon reduction targets approved by the SBTi.

**Formula:**

- Aggregate index weight of companies with a lack in science-based greenhouse gas emissions reduction targets, the result is expressed in percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a CompWOCarbonEmissionReduct flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:

i = index constituent with a CompWOCarbonEmissionReduct flagged True

### 2.22 WATER USAGE AND RECYCLING

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Freshwater Use Intensity (Cubic Metres per Mio EUR of Revenue): This factor provides the average amount of freshwater consumed by the issuer (in cubic meter) per million EUR of revenue. Reclaimed water is not included. For funds and other aggregated issuers, the value is based on a weighted average of holdings with exposure.

**Proxy Justification:** ISS ESG collects data on freshwater use but does not collect information on reclaimed water. Issuers fall within the scope of data collection for Freshwater use intensity (cubic meters per Mio EUR of revenue) if they are in the ISS ESG’s Corporate Rating universe and are NOT designated as the ESG Rating Industry of Real Estate.

**Formula:** Weighted average amount of freshwater consumed per million EUR of revenue, the result is expressed in cubic meter per million EUR of revenue.

$$\sum_{i=1} \frac{\text{FreshwaterUseIntensity}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:  
 FreshwaterUseIntensity(i) = average amount of freshwater consumed per million EUR of revenue of constituent i  
 W(i) = index constituent weight for equity i  
 i = index constituent with a FreshwaterUseIntensity

## 2.23 INVESTMENTS IN COMPANIES WITHOUT WATER MANAGEMENT POLICIES

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of the issuer lacks sufficient management policies. This factor is based on an assessment of performance across key indicators, including activities and impacts in regions with high levels of water stress, freshwater use inventories, freshwater use reduction targets and action plans. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Proxy Justification:** ISS ESG assesses performance related to water management, not merely the presence of related policies. Issuers fall within the scope of data collection for Water Management Policies if they are in ISS ESG’s Corporate Rating universe and designated as any one of the following ESG Rating Industries: (Aerospace & Defense) OR (Air Freights & Logistics) OR (Auto Components) OR (Automobile) OR (Beverages) OR (Chemicals) OR (Coal & Consumable Fuels) OR (Construction) OR (Construction Materials) OR (Electric Utilities) OR (Electrical Equipment) OR (Electrical Components) OR (Electronic Devices & Appliances) OR (Food Products) OR (Furniture & Fittings) OR (Gas and Electricity Network Operators) OR (Health Care Equipment & Supplies) OR (Heavy Trucks & Construction & Farm Machinery) OR (Household & Personal Products) OR (Industrial Conglomerates) OR (Industrial Machinery & Equipment) OR (Integrated Oil & Gas) OR (Leisure) OR (Leisure Products) OR (Marine Transportation) OR (Media) OR (Metals Processing & Production) OR (Mining & Integrated Production) OR (Multi-Utilities) OR (Oil & Gas Equipment/Services) OR (Oil & Gas Exploration & Production) OR (Oil & Gas Refining & Marketing) OR (Oil & Gas Storage & Pipelines) OR (Packaging) OR (Paper & Forest Products) or (Pharmaceuticals & Biotechnology) OR (Rail Transportation) OR (Real Estate) OR (Restaurants) OR (Road Transportation) OR (Semiconductor Equipment) OR (Semiconductors) OR (Textiles & Apparel) OR (Tobacco) OR (Trading Companies & Distributors) OR (Transportation Infrastructure) OR (Water and Waste Utilities).

**Formula:**

- Aggregate index weight of companies with a lack of sufficient management policies, the result is expressed in percentage.

$$\sum_{i=1} W(i)$$

where:  
 W(i) = index constituent weight for equity i  
 i = index constituent with a LackofWaterManPolicies flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:  
 i = index constituent with a LackofWaterManPolicies flagged True

## 2.24 NON-RECYCLED WASTE RATIO

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor assesses the total waste generated by a company. Both hazardous and non-hazardous waste are relevant. The unit for this factor is: tons (t) per million EUR of Enterprise Value Including Cash (EVIC).

**Proxy Justification:** ISS ESG collects total waste volumes including recycled and non-recycled). Issuers fall within the scope of data collection for Total Waste per Mio EUR EVIC if they are in ISS ESG’s Corporate Rating universe and designated as any one of the following ESG Rating Industries: (Aerospace & Defense) OR (Auto Components) OR (Automobile) OR (Beverages) OR (Chemicals) OR (Construction Materials) OR (Construction) OR (Commercial Support Services) OR (Electronic Components) OR (Electrical Equipment) OR (Electronic Devices & Appliances) OR (Education Services) OR (Food Products) OR (Furniture & Fittings) OR (Health Care Equipment & Supplies ) OR (Health Care Facilities & Services) OR (Heavy Trucks & Construction & Farm Machinery) OR (Household & Personal Products) OR (Human Resource & Employment Services) OR (Industrial Conglomerates) OR (Industrial Machinery & Equipment) OR (Industrial Support Services) OR (Media) OR (Metals Processing & Production) OR (Mining & Integrated Production) OR (Multi-Sector Holdings) OR (Paper & Forest Products) OR (Packaging) OR (Pharmaceuticals & Biotechnology) OR (Research & Consulting Services) OR (Restaurants) OR (Retail) OR (Semiconductor Equipment) OR (Semiconductors) OR (Telecommunications) OR (Transportation Infrastructure) OR (Tobacco) OR (Textiles & Apparel).

**Formula:** Weighted average total waste generated, the result is expressed in tons per million EUR of EVIC.

$$\sum_{i=1} \frac{CRTotalWasteEVIC(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

- CRTotalWasteEVIC(i) = CRTotalWasteEVIC of constituent i
- W(i) = index constituent weight for equity i
- i = index constituent with a CRTotalWasteEVIC

## 2.25 NATURAL SPECIES AND PROTECTED AREAS

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Controversies Affecting Threatened Species: This factor provides a T/F indication of whether the issuer is involved in controversies which affect IUCN Red List species. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Proxy Justification:** ISS ESG tracks controversies that affect IUCN Red List species. While overlap may exist, national conservation lists are not separately tracked.

**Formula:**

- Aggregate index weight of companies involved in controversies which affect IUCN Red List species, the result is expressed in percentage.

$$\sum_{i=1} W(i)$$

where:

- W(i) = index constituent weight for equity i
- i = index constituent with an ContrAffectThreatenedSpecies flagged True

### 3. SOCIAL FACTORS

#### 3.1 SOCIAL SCORE

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a numeric score from 1 (D-), being poor, to 4 (A+), being high, linked to the rated entity's Social rating. The Social rating is based on an assessment of performance across key social sustainability metrics, including staff and suppliers, health and safety, human rights, sector specific product responsibility, and other issues.

**Formula:** Weighted average score, the result is expressed in value ranging 1 to 4, where higher is better.

$$\sum_{i=1} \frac{SocRatingNumeric(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:  
SocRatingNumeric (i) = Social score of constituent i  
W(i) = index constituent weight for equity i  
i = index constituent with a SocRatingNumeric

#### 3.2 CONTROVERSIAL WEAPONS

**BMR - International treaties and conventions, United Nations principles or, where applicable, national law used in order to determine what constitutes a 'controversial weapon'**

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Indicates companies with verified involvement in controversial weapons (biological, chemical and nuclear weapons, cluster munitions, anti-personnel mines, depleted uranium). The result is expressed as a sum of weights of companies with verified involvement.

- Anti-personnel mines
  - Convention on the Prohibition of the Use
  - Stockpiling
  - Production and Transfer of Anti-Personnel Mines and on Their Destruction
- Biological weapons
  - Convention on the Prohibition of the Development
  - Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction
- Chemical weapons
  - Convention on the Prohibition of the Development
  - Production
  - Stockpiling and Use of Chemical Weapons and on their Destruction
- Cluster munitions:
  - Convention on Cluster Munitions
- Nuclear weapons:

- Treaty on the Non-Proliferation of Nuclear Weapons
- The International Court of Justice's Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons
- The Treaty on the Prohibition of Nuclear Weapons

**Formula:** Aggregate index weight of companies flagged True, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a InvContrWepBMR flagged True

### SFDR - Anti-personnel mines, cluster munitions, chemical weapons and biological weapons

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Controversial Weapons Involvement (APM, CM, Bio, Chem): This factor provides a T/F indication of whether the issuer has verified involvement in anti-personnel mines, cluster munitions, chemical weapons or biological weapons. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Formula:** Aggregate index weight of companies flagged True, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a InvolvementInContrWeapons flagged True

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## 3.3 TOBACCO INVOLVEMENT

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Tobacco - Revenue Share: This factor identifies the max percentage value of revenue derived from involvement in tobacco.

**Formula:** Weighted average revenue share from involvement in tobacco, the result is expressed as a percentage.

$$\sum_{i=1} \frac{\text{TobaccoRevShareMax}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

TobaccoRevShareMax(i) = Social score of constituent i

W(i) = index constituent weight for equity i



i = index constituent with a TobaccoRevShareMax

### 3.4 SOCIAL VIOLATION

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Indicates companies with a verified failure to respect established norms with regard to Human Right or Labor Rights. The Norm-Based Research assesses corporate involvement in alleged or verified failures to respect established norms on human rights, labor standards, environmental protection and business malpractice set out in authoritative standards on responsible business conduct.

Key Normative Frameworks :	<ul style="list-style-type: none"> <li>-UN Global Compact</li> <li>-OECD Guidelines</li> <li>-UN Guiding Principles</li> <li>-UN Sustainable Development Goals</li> </ul>	<ul style="list-style-type: none"> <li>-ILO Conventions</li> <li>-ICCPR and ICESCR</li> <li>-Paris Agreement</li> <li>-Convention on Biological Diversity</li> </ul>
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**Formula:**

- Aggregate index weight of companies with a red flag, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i  
 i = index constituent with a socialviolations flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:

i = index constituent with a socialviolations flagged True

### 3.5 GENDER PAY GAP

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor captures a company's global mean and unadjusted gender pay gap as a percentage. The value is the percentage by which women's salaries are lower than men's. A negative value indicates a higher female salary. For funds and other aggregated issuers, the value is based on a weighted average of the unadjusted pay gap metric for the underlying holdings.

**Formula:** Weighted average gender pay gap, the result is expressed in percentage.

$$\sum_{i=1} \frac{UnadjustedGenderPayGapMean(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

UnadjustedGenderPayGapMean (i) = unadjusted gender pay gap of constituent i

W(i) = index constituent weight for equity i

i = index constituent with an UnadjustedGenderPayGapMean

### 3.6 RATIO OF FEMALE TO MALE BOARD MEMBERS

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Board members who are women.

**Formula:** Weighted average ratio of female to male board members, the result is expressed in percentage.

$$\frac{\sum_{i=1} \frac{\text{RatioOfWomenOnBoard}(i) \times W(i)}{\sum_{i=1} W(i)}}{1 - \sum_{i=1} \frac{\text{RatioOfWomenOnBoard}(i) \times W(i)}{\sum_{i=1} W(i)}}$$

where:

RatioOfWomenOnBoard(i) = Woman board member % of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a RatioOfWomenOnBoard

### 3.7 RATIO OF ACCIDENTS, INJURIES, FATALITIES

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor evaluates the company employee's total recordable incident rate, normalized by 200,000 hours worked. 200,000 working hours correspond to 100 full time equivalents (FTE) or 100 employees working 40 hours for 50 weeks. Recordable incidents are defined as the sum of all recordable workplace injuries plus all medical treatment cases (MTC) plus all restricted work cases (RWC).

**Proxy Justification:** ISS ESG delivers data only where the company reports according to standardised metrics, i.e. Total Recordable Incident Rate per 200,000 working hours. Issuers fall within the scope of data collection for CR Raw - Tot. record. incident rate per 200000 working hrs if they are in ISS ESG's Corporate Rating universe and designated as any one of the following ESG Rating Industries: (Aerospace & Defence) OR (Airlines) OR (Auto Components) OR (Automobile) OR (Beverages) OR (Chemicals) OR (Construction Materials) OR (Construction) OR (Commercial Support Services) OR (Electronic Components) OR (Electrical Equipment) OR (Electronic Devices & Appliances) OR (Education Services) OR (Food Products) OR (Furniture & Fittings) OR (Health Care Equipment & Supplies ) OR (Health Care Facilities & Services) OR (Health Care Technology & Services) OR (Human Resources & Employment Services) OR (Heavy Trucks & Construction & Farm Machinery) OR (Household & Personal Products) OR (Human Resource & Employment Services) OR (Industrial Conglomerates) OR (Industrial Machinery & Equipment) OR (Industrial Support Services) OR (Integrated Oil & Gas) OR (Interactive Media & Online Consumer Services) OR (IT Consulting & Other Services) OR (Media) OR (Metals Processing & Production) OR (Mining & Integrated Production) OR (Multi-Sector Holdings) OR (Paper & Forest Products) OR (Packaging) OR (Pharmaceuticals & Biotechnology) OR (Research & Consulting Services) OR (Restaurants) OR (Retail) OR (Semiconductor Equipment) OR (Semiconductors) OR (Telecommunications) OR (Transportation Infrastructure) OR (Tobacco) OR (Textiles & Apparel).

**Formula:** Weighted average total recordable incident rate, the result is expressed in incident per 100 FTE.

$$\sum_{i=1} \frac{\text{CRAccidTRIR200000hrs}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

CRAccidTRIR200000hrs (i) = CRAccidTRIR200000hrs of constituent i

W(i) = index constituent weight for equity i  
i = index constituent with an CRAccidTRIR200000hrs

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### 3.8 VIOLATIONS OF UN GLOBAL COMPACT (UNGC) PRINCIPLES & ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT (OECD) GUIDELINES FOR MULTINATIONAL ENTERPRISES

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer is involved in verified violations of the UN Global Compact principles or OECD Guidelines for Multinational Enterprises. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Formula:** Aggregate index weight of companies with a True value, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i  
i = index constituent with an UNGCOECDGuidelinesViolation flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:

i = index constituent with a UNGCOECDGuidelinesViolation flagged True

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### 3.9 LACK OF PROCESSES AND COMPLIANCE MECHANISMS TO MONITOR COMPLIANCE WITH UN GLOBAL COMPACT PRINCIPLES AND OECD GUIDELINES FOR MULTINATIONAL ENTERPRISES

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer lacks policies to monitor compliance with the UN Global Compact principles or OECD Guidelines for Multinational Enterprises, or grievance/complaints handling mechanisms to address violations of the UN Global Compact principles or OECD Guidelines for Multinational Enterprises. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Proxy Justification:** Interpretations of the indicator may differ.

**Formula:**

- Aggregate index weight of companies with a True value, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a LackProcessesUNGCOECDGuidelines flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:

i = index constituent with a LackProcessesUNGCOECDGuidelines flagged True

### 3.10 COMPANIES WITHOUT WORKPLACE ACCIDENT PREVENTION POLICIES

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer lacks a policy that specifically addresses occupational health and safety. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Formula:**

- Aggregate index weight of companies with a True value, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a CompWOWorkPlaceAccPrevention flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:

i = index constituent with a CompWOWorkPlaceAccPrevention flagged True

### 3.11 LACK OF A SUPPLIER CODE OF CONDUCT

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer lacks a supplier code of conduct. This assessment is based on whether the company has implemented a standard on labor rights and working conditions for its suppliers and contractors taking into account the quality of the standard. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Formula:** Aggregate index weight of companies with a True value, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with a LackSupplierCodeConduct flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:

i = index constituent with a LackSupplierCodeConduct flagged True

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### 3.12 INSUFFICIENT WHISTLE-BLOWER PROTECTION

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer lacks a confidential hotline and stated protection of whistle-blowers. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Proxy Justification:** ISS ESG data point encompasses information not only on the presence of policies on the protection of whistle-blowers, but also on the existence of a confidential hotline dedicated to whistleblowing.

**Formula:**

- Aggregate index weight of companies with a True value, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i

i = index constituent with an LackSupplierCodeConduct flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:

i = index constituent with a LackSupplierCodeConduct flagged True

### 3.13 LACK OF A HUMAN RIGHTS POLICY

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Lack of human rights policy: This factor provides a T/F indication of whether the issuer lacks a human rights policy. This factor is based on the assessment of the company's commitment to internationally recognized human rights as well as the avoidance of the company's complicity in their violation. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Proxy Justification:** ISS ESG's definition of human rights policy does not require approval at board level.

**Formula:**

- Aggregate index weight of companies with a True value, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:

W(i) = index constituent weight for equity i  
i = index constituent with a LackHumanRightsPolicy flagged True

- Count of index constituent with a True value, the result is expressed as a numerical value.

$$\sum_{i=1} (i)$$

where:

i = index constituent with a LackHumanRightsPolicy flagged True

### 3.14 LACK OF A HUMAN RIGHTS DUE DILIGENCE PROCEDURES

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:**

Lack of human rights due diligence procedures: This factor provides a T/F indication of whether the issuer lacks due diligence procedures to analyse, prevent, reduce and mitigate the actual and potential negative impact on human rights of stakeholders such as communities or indigenous peoples. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Formula:**

- Aggregate index weight of companies with a True value, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:  
 W(i) = index constituent weight for equity i  
 i = index constituent with a LackHumanRightsDDProcedures flagged True

### 3.15 NBR OVERALL FLAG

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:**

This factor assigns an overall Red, Amber, or Green flag to an issuer based on the issuer's link with any breaches of international standards. The "Red" value covers instances of a failure to respect established norms which has been verified by an authoritative body and where the issue remains unaddressed. The "Amber" value covers instances where the issuer has entered contract(s) that would, when actualised, lead to a failure to respect established norms; where there are credible allegations that the issuer is involved in a failure to respect an established norm; where the failure to respect established norms has been verified, yet the issuer is implementing remedial measures; or where there are credible allegations but there is fragmentary information about the issuer's ongoing involvement. The "Green" value covers instances where there are allegations of a failure to respect international norms, but the information is fragmentary or the severity has yet to be established; where the incidents are not severe and the issuer has committed to improve its practice, but the issue is not yet fully addressed.

**Formula:**

- Aggregate index weight of companies with a True value, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:  
 W(i) = index constituent weight for equity i  
 i = index constituent with a NBSOverallFlag flagged True

## 4. GOVERNANCE FACTORS

### 4.1 GOVERNANCE SCORE

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a numeric score from 1 (D-) to 4 (A+) linked to the rated entity's Governance rating. The Governance rating is based on an assessment of performance across key governance metrics, including business ethics, corporate governance, and other issues.

**Formula:** Weighted average score, the result is expressed in value ranging 1 to 4, where higher is better.

$$\sum_{i=1} \frac{GovRatingNumeric(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

GovRatingNumeric(i) = Governance score of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a GovRatingNumeric

### 4.2 INDEPENDENT BOARD MEMBER

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Board members who are independent based on ISS classification of Independence.

**Formula:** Weighted average board members who are independent

$$\sum_{i=1} \frac{BoardIndependenceRatioPAS(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

BoardIndependenceRatioPAS (i) = Independent board member % of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a BoardIndependenceRatioPAS

### 4.3 WOMEN BOARD MEMBER

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** Board members who are women

**Formula:** Weighted average women on board, the result is expressed as a percentage.

$$\sum_{i=1} \frac{RatioOfWomenOnBoard(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:



RatioOfWomenOnBoard(i) = Woman board member % of constituent i  
W(i) = index constituent weight for equity i  
i = index constituent with a RatioOfWomenOnBoard

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#### 4.4 COMPANIES WITHOUT DUE DILIGENCE POLICIES ON ISSUES ADDRESSED BY THE FUNDAMENTAL ILO CONVENTIONS 1 TO 8

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer lacks due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8.

**Formula:** Weighted average percentage of companies that lacks due diligence policies on issues addressed by the fundamental ILO Conventions 1 to 8, the result is expressed as a percentage.

$$\sum_{i=1} \frac{\text{LackLaborRightsDDBMR}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:  
LackLaborRightsDDBMR(i) = lacks due diligence policies (ILO Conventions 1 to 8) % of constituent i  
W(i) = index constituent weight for equity i  
i = index constituent with a LackLaborRightsDDBMR

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#### 4.5 COMPANIES LACK OF ANTI-CORRUPTION AND ANTI-BRIBERY POLICIES

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides a T/F indication of whether the issuer is involved in controversies related to accounting fraud, bribery or money laundering, where remedial measures have not been implemented. For funds and other aggregated issuers, if any of the underlying holdings is True for this indicator the fund receives the True value.

**Formula:** Aggregate index weight of companies flagged True, the result is expressed as a percentage.

$$\sum_{i=1} W(i)$$

where:  
W(i) = index constituent weight for equity i  
i = index constituent with a InsActionAntiCorruptionBreaches flagged True

### 4.6 EXCESSIVE CEO PAY RATIO

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor provides the issuer's ratio of the annual total compensation of the CEO to the median annual total compensation for all employees (excluding the highest compensated individual). For funds and other aggregated issuers, the value is based on a weighted average of holdings with exposure.

**Proxy Justification:** ISS ESG data point utilizes the pay of CEO, not the highest paid employee, however this will normally be the same in over 95% of cases.

**Formula:** Weighted average ratio within investee companies of the annual total compensation for the highest compensated individual to the median annual total compensation for all employees (excluding the highest compensated individual), the result is expressed as a numerical value.

$$\sum_{i=1} \frac{\text{CEOEmployeePayDisclosedByCompany}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

CEOEmployeePayDisclosedByCompany(i) = ratio of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a CEOEmployeePayDisclosedByCompany

### 4.7 TOTAL MONETARY LOSSES FROM CORRUPTION

**Source:** ISS ESG (<https://www.issgovernance.com/esg/>)

**Description:** This factor identifies if a company discloses the monetary value of losses incurred through legal proceedings related to corruption in USD.

**Formula:** Weighted average ratio of the total monetary value of losses incurred through legal proceedings related to corruption in USD, the result is expressed as a numerical value.

$$\sum_{i=1} \frac{\text{MonLossFromCorruptionQnt}(i) \times W(i)}{\sum_{i=1} W(i)}$$

where:

MonLossFromCorruptionQnt (i) = monetary value of losses incurred through legal proceedings related to corruption in USD of constituent i

W(i) = index constituent weight for equity i

i = index constituent with a MonLossFromCorruptionQnt