

# SOLACTIVE ESG FACTOR DISCLOSURE GUIDELINE

Sources, definitions, and calculations of ESG factors  
disclosed in benchmark statements based on Commission  
Delegated Regulation (EU) 2020/1816

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## INTRODUCTION

Commission Delegated Regulation (EU) 2020/1816 (the "**DELEGATED REGULATION**") sets out the requirements for disclosures on how ESG factors are reflected in each benchmark provided and published by a benchmark administrator.

Annexes I and II to the DELEGATED REGULATION provide templates for the disclosures and a list of ESG factors to be considered for disclosure by benchmark administrators.

Solactive AG's ("**SOLACTIVE**") solution to meet these requirements features the following structure:

- Required disclosures of ESG factors are provided in the benchmark statement of each index for which SOLACTIVE acts as the benchmark administrator
- ESG factors whose disclosure is voluntary (based on the classification in Annex II to the DELEGATED REGULATION), are not disclosed by SOLACTIVE
- Benchmark statements are available to the public on the respective index page at [www.solactive.com](http://www.solactive.com).

This document provides details on the ESG factors disclosed by SOLACTIVE in the benchmark statement of any index for which SOLACTIVE acts as the benchmark administrator. These details include the source and definition of underlying data as well as the calculation of the final ESG factors disclosed by SOLACTIVE.



## 1. HOW TO READ THIS DOCUMENT

Based on the general structure provided in Annexes I and II to the DELEGATED REGULATION, this document categorizes disclosures depending on the relevant underlying asset class of the index (equity, fixed income, sovereign debt).

For each item listed in the relevant subsection, detailed information is provided in the following format:

### *Name of the disclosed ESG factor as provided in the respective Benchmark Statement*

**Source:** Source of the data

**Definition:** Definition of the data underlying the disclosed ESG factor

**Calculation:** Description of the calculation of the disclosed ESG factor to arrive at the number published in the benchmark statement

## 2. DISCLOSURES FOR EQUITY INDICES

### 2.1 COMBINED ESG FACTORS

All ESG factors listed under “Combined ESG Factors” in Annex II to the DELEGATED REGULATION, are marked as “voluntary” and thus not disclosed by Solactive

### 2.2 ENVIRONMENTAL FACTORS

#### *Exposure of the benchmark portfolio to the sectors listed in Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006 of the European Parliament and of the Council as a percentage of the total weight in the portfolio*

**Source:** FactSet

**Definition:** NACE Rev. 2.- The statistical classification of economic activities in the European Union (EU), abbreviated as NACE

NACE is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment and national accounts) and in other statistical domains developed within the European statistical system (ESS)

**Calculation:** Aggregate index weight of all index components with the following NACE Section Codes:



NACE Section Code	NACE Section Description
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

### *Greenhouse Gas (GHG) Intensity*

**Source:** ISS ESG

**Definition:** Scope 1 + Scope 2 GHG emissions (tons CO<sub>2</sub>E) per million USD of revenue

**Calculation:** Weighted average GHG intensity of individual index components

### *Percentage of GHG emissions reported versus estimated (% reported GHG emissions / % estimated GHG emissions)*

**Source:** ISS ESG

**Definition:** Reported data includes information derived from sustainability or annual reports of issuers, CDP disclosures (i.e. disclosures provided via the disclosure system of the Carbon Disclosure Project (CDP)), or other verified resources. Modelled emissions are used for issuers where ISS ESG has applied 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

**Calculation:** Absolute number of index components with reported/estimated GHG intensity relative to total number of index components

### *Exposure of the benchmark portfolio to companies the activities of which fall under Divisions 05 to 09, 19 and 20 of Annex I to Regulation (EC) No 1893/2006*

**Source:** FactSet

**Definition:** : NACE Rev. 2. - The statistical classification of economic activities in the European Union (EU), abbreviated as NACE

NACE is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment and national accounts) and in other statistical domains developed within the European statistical system (ESS)

**Calculation:** Aggregate index weight of all index components with the following NACE Division Codes:



NACE Division Code	NACE Division Description
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

*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*

**Source:** ISS ESG

**Definition:** This factor identifies the % of total revenue derived from activities included in the environmental goods and services sector

**Calculation:** Weighted average % of total revenue derived from activities included in the environmental goods and services sector of individual index components

## 2.3 SOCIAL FACTORS

*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

**Definition:**

- **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 and the International Court of Justice's Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons as well as the Treaty on the Prohibition of Nuclear Weapons



**Calculation:** no calculation needed

### *Controversial Weapons %*

**Source:** ISS ESG

**Definition:** Indicates issuers with verified or potential involvement in controversial weapons (biological, chemical and nuclear weapons, cluster munitions, anti-personnel mines, depleted uranium)

**Calculation:** Aggregate index weight of all index components with verified or potential involvement in controversial weapons

### *Tobacco %*

**Source:** ISS ESG

**Definition:** Identifies issuers engaged in the production, distribution, or provision of services related to tobacco. The "Production" value identifies issuers engaged in manufacturing and producing tobacco products, as well as issuers that grow or process raw tobacco leaves, "Distribution" includes issuers engaged in the wholesale or retail distribution of tobacco products, and "Services" identifies issuers engaged in marketing and promotion of tobacco products, issuers that supply key products necessary for the production of tobacco products, as well as issuers that license a company or brand name to tobacco products

**Calculation:** Aggregate index weight of all index components with any engagement in the production, distribution, or provision of services related to tobacco

### *Social Violations*

**Source:** ISS ESG

**Definition:** Indicates issuers with a verified failure to respect established norms regarding human rights or labor rights

**Calculation:**

1. Total: absolute number of index components with verified failure to respect established norms regarding human rights or labor rights
2. % of constituents: number of index components with a verified failure to respect established norms regarding human rights or labor rights relative to total number of index components

### *Exposure of the benchmark portfolio to companies without due diligence policies on issues addressed by the fundamental International Labour Organization Conventions 1 to 8*

**Source:** ISS ESG



**Definition:** Indicates issuers lacking due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8

**Calculation:** Aggregate index weight of all index components lacking due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8

### *Gender pay gap*

**Source:** ISS ESG

**Definition:** 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

**Calculation:** Weighted average mean and unadjusted gender pay gap

### *Ratio of female to male board members*

**Source:** ISS ESG

**Definition:** Ratio of female to male board members

**Calculation:** Weighted average ratio of female to male board members

### *Ratio of accidents, injuries, fatalities*

**Source:** ISS ESG

**Definition:** The 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).

**Calculation:** Weighted average total recordable injury rate

### *Number of convictions and amount of fines for violations of anti-corruption and antibribery laws*

Currently not disclosed due to data unavailability

## 2.4 GOVERNANCE FACTORS

### *Independent board members %*

**Source:** ISS ESG

**Definition:** Percentage of directors identified as "Independent" based on ISS classification.





**Calculation:** Weighted average percentage of independent board members of individual index components

*Female board members %*

**Source:** ISS ESG

**Definition:** Share of female board members

**Calculation:** Weighted average percentage of female board members share of individual index components



## 3. DISCLOSURES FOR FIXED INCOME INDICES

### 3.1 COMBINED ESG FACTORS

All ESG factors listed under “Combined ESG Factors” in Annex II to the DELEGATED REGULATION, are marked as “voluntary” and thus not disclosed by Solactive

### 3.2 ENVIRONMENTAL FACTORS

*Exposure of the benchmark portfolio to the sectors listed in Sections A to H and Section L of Annex I to Regulation (EC) No 1893/2006 of the European Parliament and of the Council as a percentage of the total weight in the portfolio*

**Source:** FactSet

**Definition:** NACE Rev. 2.- The statistical classification of economic activities in the European Union (EU), abbreviated as NACE

NACE is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment and national accounts) and in other statistical domains developed within the European statistical system (ESS)

**Calculation:** Aggregate index weight of all index components with the following NACE Section Codes:

NACE Section Code	NACE Section Description
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

#### *Greenhouse Gas (GHG) Intensity*

**Source:** ISS ESG

**Definition:** Scope 1 + Scope 2 GHG emissions (tons CO<sub>2</sub>E) per million USD of revenue

**Calculation:** Weighted average GHG intensity of individual index components



***Percentage of GHG emissions reported versus estimated (% reported GHG emissions / % estimated GHG emissions)***

**Source:** ISS ESG

**Definition:** Reported data includes information derived from sustainability or annual reports of issuers, CDP disclosures (i.e. disclosures provided via the disclosure system of the Carbon Disclosure Project (CDP)), or other verified resources. Modelled emissions are used for issuers where ISS ESG has applied 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

**Calculation:** Absolute number of index components with reported/estimated GHG intensity number relative to total number of index components

***Exposure of the benchmark portfolio to companies the activities of which fall under Divisions 05 to 09, 19 and 20 of Annex I to Regulation (EC) No 1893/2006***

**Source:** FactSet

**Definition:** : NACE Rev. 2. - The statistical classification of economic activities in the European Union (EU), abbreviated as NACE

NACE is a four-digit classification providing the framework for collecting and presenting a large range of statistical data according to economic activity in the fields of economic statistics (e.g. production, employment and national accounts) and in other statistical domains developed within the European statistical system (ESS)

**Calculation:** Aggregate index weight of all index components with the following NACE Division Codes:

<b>NACE Division Code</b>	<b>NACE Division Description</b>
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

***Green Bonds %***

**Source:** Climate Bonds Initiative

**Definition:** The Climate Bonds Initiative screens labelled green debt instruments by reference to their Climate Bonds Taxonomy to identify green bonds. Additional details as well as a detailed methodology



document for the Climate Bonds Initiative's Climate Bonds Taxonomy is available at: <https://www.climatebonds.net/>

**Calculation:** Absolute number of index components identified as a green bond relative to total number of index components

### 3.3 SOCIAL FACTORS

*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

**Definition:**

- **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 and the International Court of Justice's Advisory Opinion on the Legality of the Threat or Use of Nuclear Weapons as well as the Treaty on the Prohibition of Nuclear Weapons

**Calculation:** no calculation needed

#### *Controversial Weapons %*

**Source:** ISS ESG

**Definition:** Indicates companies with verified or potential involvement in controversial weapons (biological, chemical and nuclear weapons, cluster munitions, anti-personnel mines, depleted uranium)

**Calculation:** Aggregate index weight of all index components with verified or potential involvement in controversial weapons

#### *Tobacco %*

**Published for index asset class:** Equities, Fixed Income – Corporate

**Source:** ISS ESG



**Definition:** Identifies issuers engaged in the production, distribution, or provision of services related to tobacco. The "Production" value identifies issuers engaged in manufacturing and producing tobacco products, as well as companies that grow or process raw tobacco leaves, "Distribution" includes issuers engaged in the wholesale or retail distribution of tobacco products, and "Services" identifies issuers engaged in marketing and promotion of tobacco products, issuers that supply key products necessary for the production of tobacco products, as well as issuers that license a company or brand name to tobacco products

**Calculation:** Aggregate index weight of all index components with any engagement in the production, distribution, or provision of services related to tobacco

### *Social Violations*

**Source:** ISS ESG

**Definition:** Indicates companies with a verified failure to respect established norms regarding human rights or labor rights

**Calculation:**

1. Total: absolute number of index components with verified failure to respect established norms regarding human rights or labor rights
2. % of constituents: number of index components with a verified failure to respect established norms regarding human rights or labor rights relative to total number of index components

### *Exposure of the benchmark portfolio to companies without due diligence policies on issues addressed by the fundamental International Labour Organization Conventions 1 to 8*

**Source:** ISS ESG

**Definition:** Indicates issuers lacking due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8

**Calculation:** Aggregate index weight of all index components lacking due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8

### *Gender pay gap*

**Source:** ISS ESG

**Definition:** 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

**Calculation:** Weighted average mean and unadjusted gender pay gap



### *Rate of female to male board members*

**Source:** ISS ESG

**Definition:** Ratio of female to male board members

**Calculation:** Weighted average ratio of female to male board members

### *Ratio of accidents, injuries, fatalities*

**Source:** ISS ESG

**Definition:** The 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).

**Calculation:** Weighted average total recordable injury rate

### *Number of convictions and amount of fines for violations of anti-corruption and antibribery laws*

Currently not disclosed due to data unavailability

## 3.4 GOVERNANCE FACTORS

All ESG factors listed under "Governance Factors" in Annex II to the DELEGATED REGULATION, are marked as "voluntary" and thus not disclosed by Solactive



## 4. DISCLOSURES FOR SOVEREIGN DEBT INDICES

### 4.1 COMBINED ESG FACTORS

#### *% of underlying fund management companies signed up to international standards*

Currently not disclosed due to data unavailability

### 4.2 ENVIRONMENTAL FACTORS

#### *Greenhouse Gas (GHG) Intensity*

**Source:** ISS ESG

**Definition:** Tons of CO<sub>2</sub>e Emissions per million GDP (USD) for the year 2017

**Calculation:** Weighted average GHG intensity of individual index components

#### *Percentage of GHG emissions reported versus estimated (% reported GHG emissions / % estimated GHG emissions)*

**Source:** ISS ESG

**Definition:** Data from the United Nations Framework Convention on Climate Change and World Bank

**Calculation:** -

#### *Green Bonds %*

**Source:** Climate Bonds Initiative

**Definition:** The Climate Bonds Initiative screens labelled green debt instruments by reference to their Climate Bonds Taxonomy to identify green bonds. Additional details as well as a detailed methodology document for the Climate Bonds Initiative's Climate Bonds Taxonomy is available at:

<https://www.climatebonds.net/>

**Calculation:** Absolute number of index components identified as a green bond relative to total number of index components



## 4.3 SOCIAL FACTORS

### *Social Violations*

**Source:** ISS ESG

**Definition:** A controversy on the country level is constituted by one of the following criteria:

- the employment of children is widespread in a country;
- a country severely restricts freedom of association, particularly with regard to the possibility of trade union organization;
- a large-scale restriction of freedom of speech and press;
- a country severely restricts human rights, for example with regard to the protection from political despotism or torture, privacy, freedom of movement, or freedom of religion; or
- employment conditions in a country, particularly with regard to minimum wages, working hours and health and safety, are particularly poor

**Calculation:**

1. Total: absolute number of index components with a controversy as defined above
2. % of constituents: number of index components with a controversy as defined above relative to total number of index components

### *Average human rights performance of the issuers (including a quantitative indicator and the methodology used to calculate it)*

**Source:** ISS ESG

**Definition:** Provides a rated country's numeric grade from 1 (D-) to 4 (A+) based on whether a country respects and safeguards basic human rights and anti-discrimination principles. It considers whether legislation provides for these rights formally, but on the other hand also assesses whether the government and its agents respect these rights in practice

**Calculation:** Weighted average numeric grade of individual index components

### *Average income inequality score, measuring the distribution of income and economic inequality among the participants in a particular economy*

**Source:** ISS ESG

**Definition:** Provides a rated country's numeric grade from 1 (D-) to 4 (A+) based on the status of inequality concerning income inequality and wealth distribution in a country.

**Calculation:** Weighted average numeric grade of individual index components





*Average freedom of expression score measuring the extent to which political and civil society organizations can operate freely*

**Source:** ISS ESG

**Definition:** Provides a rated country's numeric grade from 1 (D-) to 4 (A+) based on whether legislation provides for freedom of speech and press, and whether the government and its agents respects these rights in practice.

**Calculation:** Weighted average numeric grade of individual index components

## 4.4 GOVERNANCE FACTORS

### *Corruption score*

**Source:** ISS ESG

**Definition:** Provides a rated country's numeric grade from 1 (D-) to 4 (A+) based on the degree to which corruption is perceived to exist among public officials and politicians measured by the Corruption Perception Index by Transparency International (<https://www.transparency.org/en/cpi>)

**Calculation:** Weighted average numeric grade of individual index components

### *Political stability score*

**Source:** ISS ESG

**Definition:** Provides a rated country's numeric grade from 1 (D-) to 4 (A+) based on a country's contribution to political stability by assessing its involvement in violent and non-violent conflicts (internally and externally), its military expenditure as percentage of its gross domestic product, as well as its share in the global export of major conventional weapons

**Calculation:** Weighted average numeric grade of individual index components

### *Rule of law score*

**Source:** ISS ESG

**Definition:** Provides a rated country's numeric grade from 1 (D-) to 4 (A+) based on the state of the rule of law in a country, i.e. 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

**Calculation:** Weighted average numeric grade of individual index components

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