

# **ESG Performance Score**

**Methodology**

---

**2023**

# Table of Contents

- Overview ..... 3
- Methodology ..... 4
  - ESG Performance Score CORE ..... 4
    - Data Collection ..... 5
    - Data Processing ..... 5
    - Category Score Calculation ..... 7
    - Materiality Scores Calculation ..... 8
  - ESG Performance Score PLUS ..... 14
    - News Data & Tagging ..... 14
    - Category News Signal ..... 15
    - Adjust Category Scores ..... 16
    - Adjust Materiality Scores ..... 16
- Appendix A: Category Scores and Inputs ..... 17
- Disclaimer ..... 30

## Overview

---

The ESG Performance Score provides investors and corporates with a systematic and comprehensive sustainability assessment of corporate entities. The ESG Performance Score measures company performance relative to salient sustainability issues across the spectrum of environmental, social and governance. The score is driven by a sector-specific scoring model that emphasises financially material issues. The definition of financial materiality is inspired by the Sustainability Accounting Standards Board (SASB) and refers to information of particular relevance to investor decision-making.

The ESG Performance Score comes with a transparent methodology and full disclosure of the underlying data. This allows users to understand the performance drivers and explain score changes at each level of the assessment. The score is designed with both investors and corporates in mind. Investors can use the score to identify companies that are more likely to outperform over the long run and create long-term enterprise value for shareholders. Corporates can use the score to systematically assess their performance, conduct peer comparisons and identify disclosure gaps.

The ESG Performance Score has two complementary offerings:

1. **ESG Performance Score - CORE:** Point-in-time scores showing the sustainability performance of companies based on publicly available company reported data. Scores are derived using a transparent aggregation methodology – with flexible outputs to accommodate different use cases.
2. **ESG Performance Score - PLUS:** CORE score adjusted for Media and NGO coverage inputs that account for recent sustainability events from news sources and NGO reports. Combined, CORE and PLUS scores allow users to differentiate performance based on company reported data (annual) and global news (daily).

The ESG Performance Score includes the following components in both "Core" and "Plus" offerings:

- Total Scores – Total Aggregated Score from the 26 Categories.
- Pillar Scores – Aggregated Scores for traditional ESG pillars
- Dimension Scores – Aggregated Scores for 5 sustainability dimensions
- Category Scores – 26 Category Scores
- Category Weights – 26 Weights applied to Category Scores to derive Total Scores
- Disclosure Score & Number of Metrics used for the score

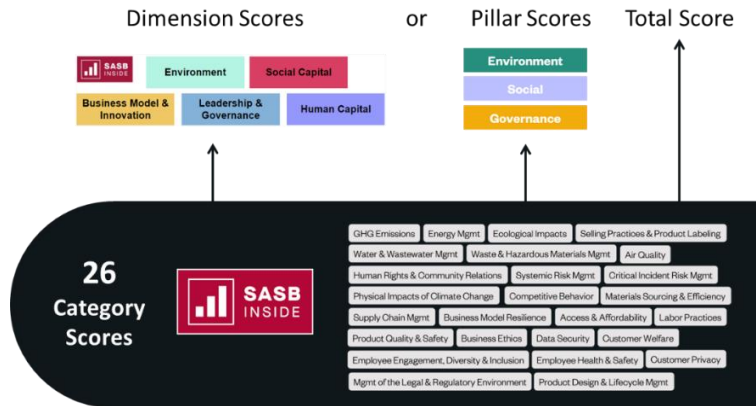


Figure 1. ESG Performance Score at a glance

## Methodology

### ESG Performance Score CORE

The ESG Performance Score CORE is a point-in-time score showing the sustainability performance of companies based on publicly available company data with flexible roll-up options. It can be used by investors and corporates for performance tracking, fundamental analysis, peer benchmarking, and identification of disclosure gaps. The ESG Performance Score CORE is calculated in four steps:

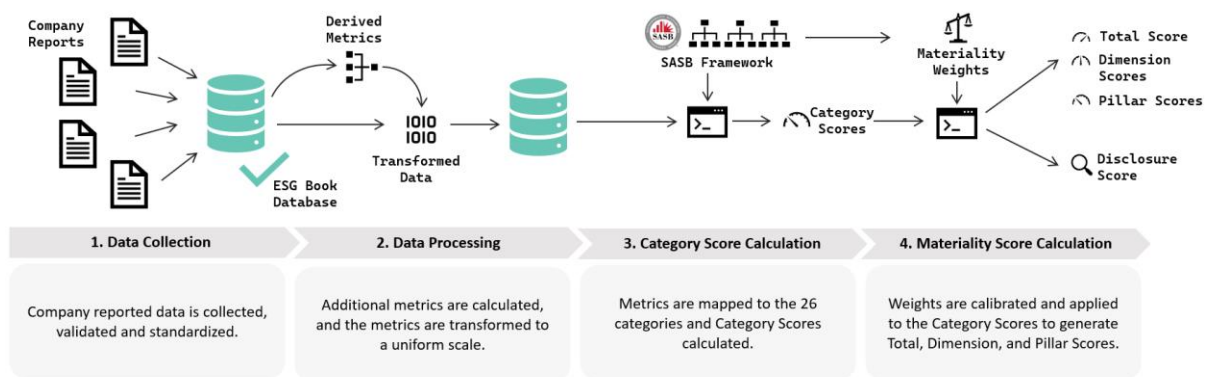


Figure 2. ESG Performance Score CORE Calculations

## Data Collection

The ESG Performance Score is powered by ESG Book's proprietary data. ESG Book proprietary data include 450+ indicators across two data modules - ESG Raw Data and Emissions Plus - and cover 9000+ companies. These data are collected in-house by sustainability experts and validated using more than 110 checks including checks on completeness, conformity, validity, accuracy, consistency, uniqueness, reasonableness, and timelines.

Upon collection, these data are standardized to SI units (for quantitative metrics), USD Thousands (for monetary metrics), and Tonnes CO2 Equivalent (for Kyoto Gases).

## Data Processing

The standardized data are used to create additional derived metrics including intensities, proportions, and growth rates. Derived metrics are calculated by integrating one or multiple metrics. Examples include Scope 1 emissions intensity, which results from dividing the Scope 1 emissions by the revenue; compound annual growth rate of waste produced, which results from calculating the mean annual growth rate of waste over a 5-year period; and percentage of water withdrawn from water stressed areas, which results from dividing the water withdrawing from water stressed areas by the total amount of water withdrawn.

### Insights: Intensities, Ratios, and Growth Rates

Absolute numbers of quantitative metrics can be misleading because they are related to company characteristics, particularly size. For example, it is reasonable to assume that, for any given industry, larger companies tend to have higher emissions, a larger amount of waste produced, and more injuries compared to smaller companies. Using absolute numbers in scores, would lead to systematic bias with larger companies receiving higher or lower scores, depending on the metric. However, if we look at the emissions per US Dollar revenue generated or per unit produced, this difference between large and small companies likely vanishes. These intensities, ratios or growth rates are more suitable to measure sustainability performance because they capture efficiency of resource use rather than reflecting absolute amounts and company size.

The ESG Performance Score is powered by 202 metrics from the modules ESG Raw Data, Emissions Plus and our proprietary set of derived metrics. These metrics include quantitative metrics (e.g., injury rate) as well as categorical metrics (e.g., presence of GHG emissions reduction targets). The metrics measure preparation, i.e., what a company is doing to achieve sustainability goals (e.g., health and safety training), as well as outcomes, i.e., the actual sustainability achievements (e.g., injury rates). The comprehensive list of metrics can be found in [Appendix A](#).

These metrics are subsequently transformed to a uniform scale ranging from 0 to 100. This is done using a relative scoring approach. Relative scoring expresses company performance relative to all other companies in a universe. This is achieved through kernel density estimation and percentile rank techniques. Put simple, the transformed data indicates where within the universe a company stands with 100 indicating best and 0 indicating worst performance. The value of 50 indicate that the company's performance is average meaning that about 50% of companies perform worse and 50% perform better.

### **Insights: Relative Scoring**

Relative scoring refers to techniques that standardize metrics based on (a) the reported value of a company and (b) the reported values of all other companies in the universe. The standardized metric is an expression on how well the company performs relative to all companies in the universe. Relative scoring allows us to identify 'best-in-class' performance and account for global trends and developments. Users can quickly spot changes in the positioning of companies that result from both companies' conduct and developments in the industry, sector or universe, more broadly. An illustrative example of the latter is a push towards more sustainable practices in an industry that are missed by a particular company. The sustainability data of this company does not change. However, the standardized metrics and hence ESG Performance Score will change as the company is 'loosing ranks' against its peers. Hence, users can assess where a company stands in the field by looking at its score and without having to perform extensive comparative analyses.

### **Insights: What is Kernel Density Estimation?**

Kernel Density Estimation (KDE) is easiest understood by taking a step back and looking at probability density functions (PDF) first. PDF are functions (or curves) that show for a certain sample space the likelihood of a specific value. A commonly known example is flipping a biased coin. We might repetitively flip the coin and record the outcomes. This gives us a 'likelihood'-curve, which in this case consists of only two pairs. This is the PDF. We can use this now to determine the likelihood of head and tail for future flips. This is a simple example using discrete data. The same is possible for continuous data. PDF functions are constructed using observed data. As observed data is often not smooth, the resulting curves have undesired hills and valleys. This is where KDE is used. KDE is a way to create smoothed PDF functions for more accurate and consistent likelihood estimations.

How is this relevant for our scores? These functions or more specifically the likelihood to achieve a certain value given a sample space can be used to assess performance. Using KDE, we can calculate the likelihood for a company to have, for example, injuries that are 3.18 per million hours worked or lower. This can be used as a performance indicator. If, given our sample space (which corresponds to the universe of scored companies), this is unlikely, then that indicates good performance. If, given our sample space, this is very likely, then this indicates bad performance.

### **Insights: What are Percentile Rank Techniques?**

Percentile Ranking is an approach to determine the 'likelihood' of a certain outcome, given a certain sample space. An easy example relates to university grades. These grades are sometimes expressed as a percentage value. The value indicates the likelihood to achieve this outcome, given the specific cohort, or simpler: how well a student performed in comparison to the students in their cohort. A value of 95 indicates that the student scored as good as or better than 95% of the cohort or put differently, there are only 5% of students who are better than this student. The underlying concept and application of Percentile Ranking Techniques are similar to that of KDE. Both are used to express an outcome, or performance, relative to a given sample universe as a likelihood or percentage value.

### **Category Score Calculation**

The Category Scores offer a nuanced perspective on companies' sustainability performance relative to 26 sustainability issues (see [Appendix A](#) for detailed definitions of the issues). The Category Scores are inspired by SASB and provide the foundation for the higher-level Materiality Scores, i.e., Total, Dimension, and Pillar Scores.

### **Insights: Inspiration from SASB**

ESG Performance Score Category and Dimension Scores are inspired by the Sustainable Accounting Standards Board (SASB) Standards. SASB Standards are part of the IFRS Foundation and form the basis of the forthcoming IFRS ISSB Standards (currently under development). SASB Standards are evidence-based and developed with broad market participation. These standards and the ongoing work of the IFRS are fundamental to address the broad request for homogenized sustainability reporting and assessments.

The ESG Performance Score's Category and Dimension Scores as well as the underlying materiality approach are inspired by the work of SASB. As such, the score contributes to the global push towards transparent, unified, and stakeholder-informed approaches to sustainability assessments.

The 26 Category Scores are calculated based on the input metrics. Metrics are mapped to the respective categories under consideration of the following guiding principles:

- a) Topics are comprehensively operationalized meaning that all key aspects of the underlying sustainability issue are reflected in the selected metrics;
- b) Metrics cover all industries meaning that for each industry there is a sufficient amount of metrics to obtain a valid score;
- c) Materiality is reflected in metric selection meaning that the mapping considers industry specific metrics, particularly where a topic is material for an industry; and
- d) Number of metrics per category is balanced across categories meaning that all categories have roughly the same amount of metrics mapped to them.

The list of underlying metrics for the 26 Categories is available in [Appendix A](#).

Category Scores are calculated as the average of the underlying transformed metrics, ignoring missing values. To receive a category score, companies need to be part of our scoring universe (see [Insights: Universe Creation](#)) and report at least two metrics of the respective category. The resulting scores range from 0 to 100 with higher values corresponding to better performance.

### **Insights: Universe**

The ESG Performance Score is powered by ESG Book's proprietary data. ESG Book's data universe includes 9000+ companies and follows the constituents of MSCI ACQI IMI Index with additional sustainability disclosure relevant filters applied. The universe of the ESG Performance Score is derived from this universe and corresponds to all companies who fulfil certain disclosure requirements. Notably, companies are included in the ESG Performance Score universe if they disclose sufficient material information -- i.e., at least four data points for two separate industry-material categories (see for more details see [Insights: Validity of Performance Score](#)).

### **Insights: The Missing Data Question**

Treatment of missing data in sustainability assessments is tricky, especially because industries differ in the salient sustainability topics and hence the relevant metrics. Broadly speaking, analytics designers are often confronted with two suboptimal choices. The first choice is to only select metrics that are relevant to all industries. This limits the choice of metrics to industry agnostic metrics. The result are generic analytics with limited insights into performance relative to industry-specific topics. The second choice is to include industry-specific metrics and accept that companies for which these metrics are not relevant get punished for non-disclosure. This leads to systematic bias of scores.

The ESG Performance Score takes a different approach. Instead of combining performance and disclosure in the calculations, these aspects are assessed separately (see [Insights: Performance and Disclosure](#)). Given certain disclosure requirements are met, performance is assessed based on the disclosed metrics. The resulting analytics account for industry-specific metrics without punishing companies to which these metrics do not apply. The result is a nuanced view that accounts for industry-specific sustainability issues.

### **Materiality Scores Calculation**

The materiality scores encompass two levels of abstraction. The Total Score provides a condensed view by expressing companies' sustainability performance in a single number. Dimension and Pillar Scores provide insights into the performance relative to specific areas of sustainability. The calculation of these scores follow a similar logic. The following paragraphs first explain this logic by means of the Total Score before delineating their application to the dimension and pillar scores.



The Total Score is calculated from the 26 Category Scores using a systematic weighting approach that accounts for industry and sector materiality. Score calculation encompasses four steps:

**1. Determine Material Categories**

For each company, we classify the categories as (a) industry material, (b) sector material, and (c) immaterial. The following graph shows the classification of categories for the Industry *Food Retailers & Distributors*:

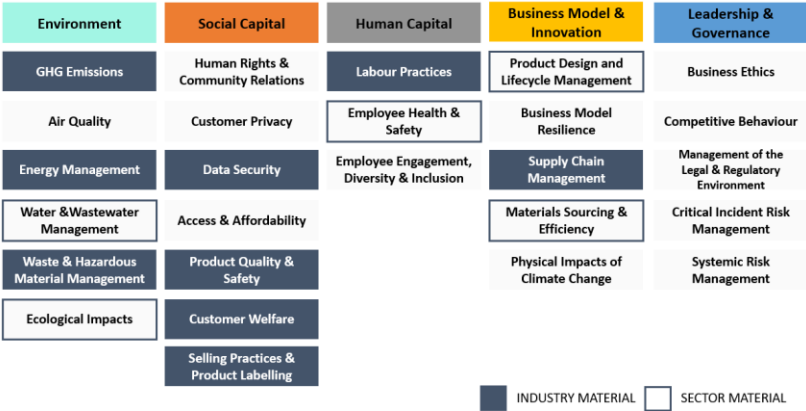


Figure 3. Materiality for Food Retailers & Distributors

**2. Calibrate Weights**

Based on this classification and the available Category Scores, we determine the weights. We use a proportional weighting approach meaning that the relative importance of industry material, sector material, and immaterial categories is always the same (see *Insights: Proportional Weighting*). An industry material category is given 2.5 times the weight of a sector material category and 10 times the weight of an immaterial category. The exact weights depend on a company’s disclosure pattern and industry/sector. Specifically, the weights are calibrated based on the number of sector material, industry material, and immaterial categories for which a company has scores. Weights are calibrated separately for every company. The following table shows an illustrative example for the Industry *Food Retailers & Distributors*, assuming full data disclosure:

Materiality	Relative Weight	Number of Categories	Calibrated Weight	Total weight
Industry	10	9	0.082	0.738
Sector	4	5	0.033	0.165
Not material	1	12	0.008	0.097

SUM EQUALS 1

Figure 4. Weights Calibration for Food Retailers & Distributors assuming full data disclosure

Using a proportional weighting approach means the relative importance of industry material, sector material, and immaterial features is the same for all companies, while the actual weights might differ across companies, even from the same sector. The weights for the Total Score are part of the data feed and can also be viewed on the ESG Book Platform.

### Insights: Proportional Weighting

The materiality scores are weighted averages of the underlying Category Scores where the weights correspond with materiality. The ESG Performance Score uses a proportional weights approach to define these weights. An industry material category is given 2.5 times the weight of a sector material category and 10 times the weight of an immaterial category. This is true across all companies and aggregation levels. It allows us to account for different degrees of importance - industry, sector, immaterial - in a way that prevents over- or under-weighting of categories. The approach is robust against differences in material sustainability issues across industries. The relative importance remains the same irrespective of number of categories per type (industry material, sector material, immaterial). The approach is also applicable to companies with varying disclosure patterns. As the weights are calibrated separately for every company, differences in disclosure does not lead to imbalanced weights.

### 3. Apply Weights

Finally, the Total Score is calculated as a weighted average of the Category Scores. Each Category Score is multiplied with its respective weight based on its classification as industry material, sector material or immaterial and the results are summed up. Applying this to our example of *Food Retailers & Distributors*:

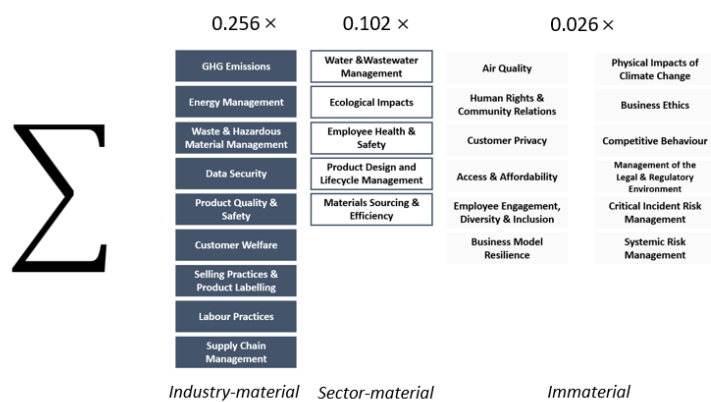


Figure 5. Applying weights to the category scores

For the Total Score to be calculated, companies need to fulfil minimal disclosure requirements. Specifically, companies only receive ESG Performance scores if they report on at least two material categories with at least four metrics each.

#### **Insights: Validity of Performance Score**

Validity (sometimes 'accuracy') refers to a score's ability to correctly represent reality, or here, correctly represent companies' sustainability performance. Validity is ensured in the Performance Score in two ways. First, the systematic selection of metrics ensures that the sustainability category is well and comprehensively represented. Second, disclosure requirements ensure that there is sufficient relevant information to make a performance statement. To receive an ESG Performance Score, companies need to disclose against at least two material sustainability topics with at least four data points each. The majority of companies go significantly over this threshold. Companies' disclosure completeness is surfaced through the Disclosure Score for a transparent and comprehensive view.

#### *4. Calculate Disclosure Score*

The Category and Materiality Scores express company performance based on disclosed data. The Total Score, for example, illustrates how well a company performs across all 26 sustainability issues based on the disclosed data. The Category and Materiality scores are complemented by the Disclosure Score. This score shows disclosure completeness relative to industry metrics on a scale from 0 to 100 with 100 indicating full disclosure.

The score calculations are based on the principle of information value. Put simply, the information added by a metric depends on the amount of existing disclosures. For example, if a company has only 10 metrics disclosed, then every additional metric is of great value as it helps us to profile the company better. In contrast, if a company has 80 metrics disclosed, then every additional metric adds value but in terms of refining rather than actually defining the company profile. This insight is reflected in the disclosure score. The calculations consider both the absolute number of disclosure as well as the relative increase of information through additional disclosures. The weight of disclosures systematically decreases with the number of disclosures. The figure below provides a graphical illustration of this.

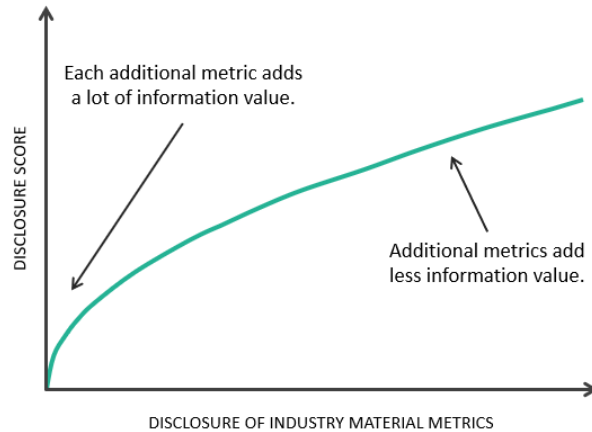


Figure 6. Disclosure Score Calculation Principle Illustration

### Insights: Performance and Disclosure

Traditionally, corporate sustainability performance scores integrate aspects of both performance and disclosure. There is one score or a set of scores on different sustainability themes. These Calculations consider the information disclosed by the company, the lack of disclosed information and, in cases where data is augmented through estimates, the expected information where actual data is unavailable. The integration of these aspects can make it difficult to interpret scores and explain performance changes – e.g., a bad score can indicate bad performance as expressed by the underlying metrics or as estimated using underlying models or it can indicate lack of disclosure. This is particularly important as disclosure requirements and patterns differ across contexts and industries.

The ESG Performance Score uses a different approach. It differentiates performance and disclosure and assesses these aspects separately. Performance Scores – Category Scores, Dimension Scores, Pillar Scores, Total Scores -- reflect company performance based on company disclosed information (CORE) and news and NGO data (PLUS). The Disclosure Score shows disclosure completeness relative to industry metrics. Combined, performance and disclosure scores provide a nuanced view with the opportunity for transparent and use-case specific analyses and integrations.

These four steps illustrate how the Total Score is derived from the 26 Category Scores. A similar logic is applied to calculate the middle layer of Dimension and Pillar Scores. Dimension Scores follow a five theme distinction inspired by SASB – Environment, Social Capital, Human Capital, Business Model & Innovation, and Leadership and Governance. The Pillar Scores align with the traditional tripartite distinction – Environment, Social, and Governance.

as the Total Score, Dimension and Pillar Scores are derived directly from the Category Scores (see [Insights: 'Why Not Using Hierarchical Aggregation?'](#) for a detailed discussion of this approach). Each of the dimensions and pillars have categories mapped to them. The Dimension and Pillar Scores are calculated by applying the

steps one to three outlined above to the underlying Category Scores. For example, the score for the dimension *Environment* is fed by six Categories - i.e., GHG Emissions, Air Quality, Energy Management, Water & Wastewater Management, Waste & Hazardous Material Management, and Ecological Impact. Weights are calibrated for each Dimension/Pillar and each company separately and then applied to arrive at the respective Dimension/Pillar Scores.

#### **Insights: Why We Are Not Using Hierarchical Aggregation**

The ESG Performance Score offers three levels of aggregation – Category Scores, Dimension or Pillar Scores, and Total Score. The aggregation does not follow a strict hierarchical or pyramid scheme. Rather Dimension Scores, Pillar Scores, and Total Scores are all derived from the Category Scores. The reason for this lies in the materiality approach. The categories are classified as industry material, sector material, and immaterial. This classification is inspired by SASB and implemented using a proportional weighting approach. We want to ensure that the weights are proportionally the same according to their classification as industry material, sector material, and immaterial. Put simply, an industry material feature weights 10-times as much as an immaterial feature and this is true for all categories and all aggregation levels. To ensure this, we need to derive Pillar, Dimension and Total Scores directly from the categories. In contrast, aggregation following a hierarchy or pyramid approach – e.g., total score as the average of the dimension scores – would result in the proportions being different within and across materiality categories.

#### **Insights: Point-in-Time for Sophisticated Analytics**

ESG Performance Score allows for Point-In-Time historical data. Company scores across all dimensions and categories for both "CORE" and "PLUS" are captured each day going back to 2015. This allows for quantitative investment modelling and similar workflows. Full history product runs are completed at quarterly intervals to ensure market information for historical datapoints is captured in "Point-in-Time" perspective, allowing quantitative analysis for "what the market knew and when". Scores, and the time series changes in those scores, can be mapped against other client data, such as company fundamentals or pricing, in order to identify correlations, trends and other patterns.

## ESG Performance Score PLUS

The ESG Performance Score PLUS provides media and NGO coverage corrected scores that account for recent sustainability events and incorporate the public perception of company. The ESG Performance Score PLUS calculations include four steps:

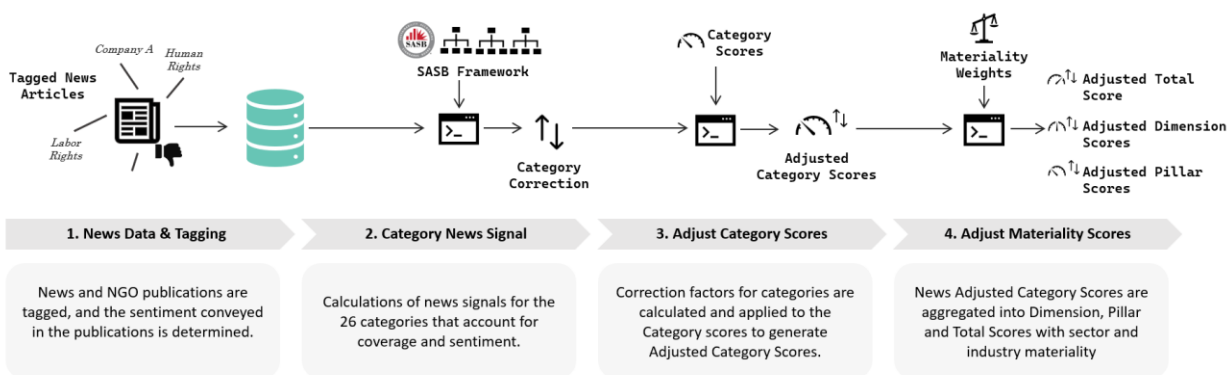


Figure 7. ESG Performance Score PLUS Calculations

### News Data & Tagging

ESG Performance Score Plus systematically integrates publications of 3000+ news and NGO sources across 170 countries. The processing of this data encompasses three steps:

#### 1. Article Tagging

For each article, the corporate entities and topics covered are identified. This tagging process is done using Natural Language Processing (NLP; for details see [Insights: What Is Natural Language Processing?](#)). Topics are selected from a list of pre-defined sustainability issues. The result is a dataset that shows for each article the topics covered and the entities associated with them.

#### Insights: What Is Natural Language Processing?

Natural Language Processing (NLP) refers to a set of algorithms used to process, analyze, and structure large amounts of written or spoken data. Using techniques from linguistics, computer science, and artificial intelligence, NLP enables computers to 'understand' texts including contextual relations and gradations. The algorithms enable users to automatize the extraction of information - such as sustainability issue or corporate entity - from texts and the categorization of documents - such as positive, negative or neutral news (see [Insights: What Is Sentiment Analysis?](#)).

## 2. Sentiment Analysis

Sentiment analysis is an NLP technique used to determine the emotional tone conveyed in a text. Applying this technique to the news articles provides insights as to whether the publication reports on good or bad corporate performance relative to the sustainability issue.

### Insights: What Is Sentiment Analysis?

Sentiment analysis is an NLP technique that involves data mining, machine learning, artificial intelligence and computational linguistics to determine the emotional tone conveyed in a body of text. There are different sentiment analysis techniques and outputs. The approach applied to the news and NGO data used in the ESG Performance Score PLUS focuses on polarity of publications. Put simply, it classifies articles as either positive, negative, or neutral.

## 3. Source value

News outlets and NGO differ in their reach, reputation, and public influence, among others. The ESG Performance Score PLUS accounts for these differences through source values. Source values quantify the impact and visibility of articles from a news and NGO outlet.

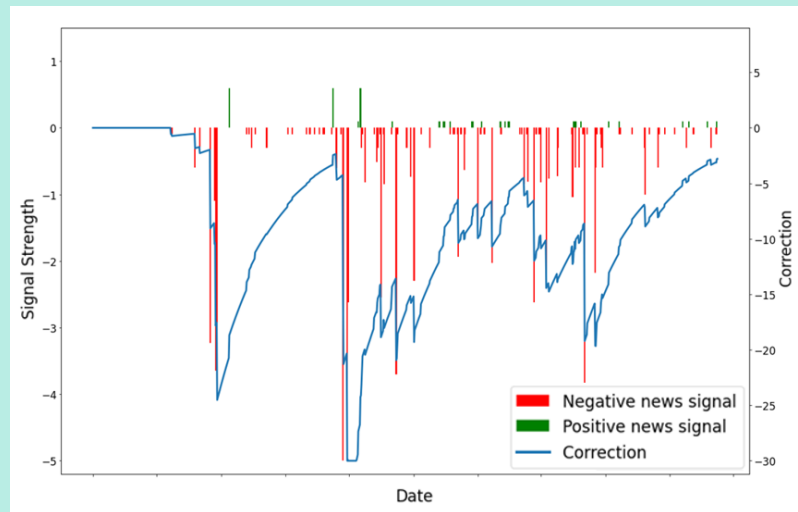
For each publication, we determine the source value of the underlying outlet. This information is subsequently added to our dataset. The resulting dataset shows, for each news article, the topics and entities covered, the sentiment conveyed and the impact of the source. This data set undergoes a de-duplication process where we ensure that articles are represented only once. For articles that are *exactly* the same and published by the same source, only the first publication is kept. For *similar* articles, both versions are retained.

### Category News Signal

These data are used to calculate news signals for each of the 26 categories. Category news signals reflect sustainability events through systematic analysis of news coverage patterns. They allow us to draw conclusions on current company performance relative to the categories. The signals are calculated for each entity and each day. They consolidate the news coverage across all outlets for the particular day and consider the conveyed sentiments and the impact of the publishing sources. The signals also take into account coverage history. Put simply, category news signals tell us what, if any, current events relevant to a company's sustainability performance there are. Negative publications are given higher weights than positive publications. Similarly, recent publications are weighted higher. In the absence of new news data, a company's signal will decay asymptotically towards zero. Hence, news signals emphasize negative events and assume that the 'outside' perspective has some memory, which fades as we move back in time (for details see [Insights: News Signals in Practice](#)).

### Insights: News Signals in Practice

The following graph shows the news coverage of a company from the *Technology & Communications* Sector. The graph shows the negative (red) and positive (green) news coverage on the company and the resulting correction (blue) for the category *Data Security*. The correction is the number applied to the Category Score to derive the New Adjusted Category Score. The graphs shows several instances of considerable negative news coverage, evident in the long red bars. These 'spikes' in negative news related to data security issues, including legal action. As a consequence of the negative coverage, there is a significant negative correction (blue) and hence the Category Score gets 'pulled down'. The correction decreases slowly - and hence the score 'recovers' - as no (or little) additional negative news is published.



### Adjust Category Scores

The Category News Signals are used to calculate correction factors. Correction factors indicate how much category scores need to be adjusted to account for company performance as evident in the media discourse. These correction factors are subsequently applied to the CORE category scores to arrive at the Adjusted Category Scores. To prevent undue influence of news and NGO publications, the amount of score change is limited.

### Adjust Materiality Scores

Finally, the Adjusted Category Scores are used to calculate Adjusted Dimension, Pillar, and Total Scores. The methodology corresponds with the CORE weighting and aggregation methodology outlined in the previous chapter. The ESG Performance Score PLUS integrates long-term company actions, performance outcomes, and media coverage.



## Appendix A: Category Scores and Inputs

Table 2. General Issue Categories and Definitions

Environment	Category	DESCRIPTION
	Air Quality	The category addresses management of air quality impacts resulting from stationary (e.g., factories, power plants) and mobile sources (e.g., trucks, delivery vehicles, planes) as well as industrial emissions. Relevant airborne pollutants include, but are not limited to, oxides of nitrogen (NOx), oxides of sulfur (SOx), volatile organic compounds (VOCs), heavy metals, particulate matter, and chlorofluorocarbons. The category does not include GHG emissions, which are addressed in a separate category.
	Ecological Impacts	The category addresses management of the companies impacts on ecosystems and biodiversity through activities including, but not limited to, land use for exploration, natural resource extraction, and cultivation, as well as project development, construction, and siting. The impacts include, but are not limited to, biodiversity loss, habitat destruction, and deforestation at all stages planning, land acquisition, permitting, development, operations, and site remediation. The category does not cover impacts of climate change on ecosystems and biodiversity.
	Energy Management	The category addresses environmental impacts associated with energy consumption. It addresses the companies management of energy in manufacturing and/or for provision of products and services derived from utility providers (grid energy) not owned or controlled by the company. More specifically, it includes management of energy efficiency and intensity, energy mix, as well as grid reliance. Upstream (e.g., suppliers) and downstream (e.g., product use) energy use is not included in the scope.
	GHG Emissions	The category addresses direct (Scope 1) greenhouse gas (GHG) emissions that a company generates through its operations. This includes GHG emissions from stationary (e.g., factories, power plants) and mobile sources (e.g., trucks, delivery vehicles, planes), whether a result of combustion of fuel or non-combusted direct releases during activities such as natural resource extraction, power generation, land use, or biogenic processes. The category further includes management of regulatory risks, environmental compliance, and reputational risks and opportunities, as they related to direct GHG emissions. The seven GHGs covered under the Kyoto Protocol are included within the categories carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF6), and nitrogen trifluoride (NF3)
	Waste Hazardous Materials Management	The category addresses environmental issues associated with hazardous and non-hazardous waste generated by companies. It addresses a companies management of solid wastes in manufacturing, agriculture, and other industrial processes. It covers treatment, handling, storage, disposal, and regulatory compliance. The category does not cover emissions to air or wastewater nor does it cover waste from end-of-life of products, which are addressed in separate categories.
	Water Wastewater Management	The category addresses a companies water use, water consumption, wastewater generation, and other impacts of operations on water resources, which may be influenced by regional differences in the availability and quality of and competition for water resources. More specifically, it addresses management strategies including, but not limited to, water efficiency, intensity, and recycling. Lastly, the category also addresses management of wastewater treatment and discharge, including groundwater and aquifer pollution.

Category	DESCRIPTION
<b>Access &amp; Affordability</b>	The category addresses management of risks related to the use of personally identifiable information (PII) and other customer or user data for secondary purposes including but not limited to marketing through affiliates and non-affiliates. The scope of the category includes social issues that may arise from a companies approach to collecting data, obtaining consent (e.g., opt-in policies), managing user and customer expectations regarding how their data is used, and managing evolving regulation. It excludes social issues arising from cybersecurity risks, which are covered in a separate category.
<b>Customer Privacy</b>	The category addresses management of the companies impacts on ecosystems and biodiversity through activities including, but not limited to, land use for exploration, natural resource extraction, and cultivation, as well as project development, construction, and siting. The impacts include, but are not limited to, biodiversity loss, habitat destruction, and deforestation at all stages planning, land acquisition, permitting, development, operations, and site remediation. The category does not cover impacts of climate change on ecosystems and biodiversity.
<b>Customer Welfare</b>	The category addresses customer welfare concerns over issues including, but not limited to, health and nutrition of foods and beverages, antibiotic use in animal production, and management of controlled substances. The category addresses the company's ability to provide consumers with manufactured products and services that are aligned with societal expectations. It does not include issues directly related to quality and safety malfunctions of manufactured products and services, but instead addresses qualities inherent to the design and delivery of products and services where customer welfare may be in question. The scope of the category also captures the ability of companies to prevent counterfeit products.
<b>Data Security</b>	The category addresses management of risks related to collection, retention, and use of sensitive, confidential, and/or proprietary customer or user data. It includes social issues that may arise from incidents such as data breaches in which personally identifiable information (PII) and other user or customer data may be exposed. It addresses a company's strategy, policies, and practices related to IT infrastructure, staff training, record keeping, cooperation with law enforcement, and other mechanisms used to ensure security of customer or user data.
<b>Human Rights &amp; Community Relations</b>	The category addresses management of the relationship between businesses and the communities in which they operate, including, but not limited to, management of direct and indirect impacts on core human rights and the treatment of indigenous peoples. More specifically, such management may cover socio-economic community impacts, community engagement, environmental justice, cultivation of local workforces, impact on local businesses, license to operate, and environmental/social impact assessments. The category does not include environmental impacts such as air pollution or waste which, although they may impact the health and safety of members of local communities, are addressed in separate categories.
<b>Product Quality &amp; Safety</b>	The category addresses issues involving unintended characteristics of products sold or services provided that may create health or safety risks to end-users. It addresses a company's ability to offer manufactured products and/or services that meet customer expectations with respect to their health and safety characteristics. It includes, but is not limited to, issues involving liability, management of recalls and market withdrawals, product testing, and chemicals/content/ingredient management in products.
<b>Selling Practices &amp; Product Labelling</b>	The category addresses social issues that may arise from a failure to manage the transparency, accuracy, and comprehensibility of marketing statements, advertising, and labeling of products and services. It includes, but is not limited to, advertising standards and regulations, ethical and responsible marketing practices, misleading or deceptive labeling, as well as discriminatory or predatory selling and lending practices. This may include deceptive or aggressive selling practices in which incentive structures for employees could encourage the sale of products or services that are not in the best interest of customers or clients.

<b>Category</b>	<b>DESCRIPTION</b>
<b>Business Model Resilience</b>	<i>The category addresses an industries capacity to manage risks and opportunities associated with incorporating social, environmental, and political transitions into long-term business model planning. This includes responsiveness to the transition to a low-carbon and climate-constrained economy, as well as growth and creation of new markets among unserved and underserved socio-economic populations. The category highlights industries in which evolving environmental and social realities may challenge companies to fundamentally adapt or may put their business models at risk.</i>
<b>Materials Sourcing &amp; Efficiency</b>	<i>The category addresses issues related to the resilience of materials supply chains to impacts of climate change and other external environmental and social factors. It captures the impacts of such external factors on operational activity of suppliers, which can further affect availability and pricing of key resources. It addresses a company's ability to manage these risks through product design, manufacturing, and end-of-life management, such as by using of recycled and renewable materials, reducing the use of key materials (dematerialization), maximizing resource efficiency in manufacturing, and making R&amp;D investments in substitute materials. Additionally, companies can manage these issues by screening, selection, monitoring, and engagement with suppliers to ensure their resilience to external risks. It does not address issues associated with environmental and social externalities created by operational activity of individual suppliers, which is covered in a separate category.</i>
<b>Physical Impacts of Climate Change</b>	<i>The category addresses the company's ability to manage risks and opportunities associated with direct exposure of its owned or controlled assets and operations to actual or potential physical impacts of climate change. It captures environmental and social issues that may arise from operational disruptions due to physical impacts of climate change. It further captures socio-economic issues resulting from companies failing to incorporate climate change consideration in products and services sold, such as insurance policies and mortgages. The category relates to the company's ability to adapt to increased frequency and severity of extreme weather, shifting climate, sea level risk, and other expected physical impacts of climate change. Management may involve enhancing resiliency of physical assets and/or surrounding infrastructure as well as incorporation of climate change-related considerations into key business activities (e.g., mortgage and insurance underwriting, planning and development of real estate projects).</i>
<b>Product Design &amp; Lifecycle Management</b>	<i>The category addresses incorporation of environmental, social, and governance (ESG) considerations in characteristics of products and services provided or sold by the company. It includes, but is not limited to, managing the lifecycle impacts of products and services, such as those related to packaging, distribution, use-phase resource intensity, and other environmental and social externalities that may occur during their use-phase or at the end of life. The category captures a company's ability to address customer and societal demand for more sustainable products and services as well as to meet evolving environmental and social regulation. It does not address direct environmental or social impacts of the company's operations nor does it address health and safety risks to consumers from product use, which are covered in other categories.</i>
<b>Supply Chain Management</b>	<i>The category addresses management of environmental, social, and governance (ESG) risks within a company's supply chain. It addresses issues associated with environmental and social externalities created by suppliers through their operational activities. Such issues include, but are not limited to, environmental responsibility, human rights, labor practices, and ethics and corruption. Management may involve screening, selection, monitoring, and engagement with suppliers on their environmental and social impacts. The category does not address the impacts of external factors such as climate change and other environmental and social factors on supplier operations and/or on the availability and pricing of key resources, which is covered in a separate category.</i>

Category	DESCRIPTION
<b>Business Ethics</b>	<p>The category addresses the companies approach to managing risks and opportunities surrounding ethical conduct of business, including fraud, corruption, bribery and facilitation payments, fiduciary responsibilities, and other behavior that may have an ethical component. This includes sensitivity to business norms and standards as they shift over time, jurisdiction, and culture. It addresses the company's ability to provide services that satisfy the highest professional and ethical standards of the industry, which means to avoid conflicts of interest, misrepresentation, bias, and negligence through training employees adequately and implementing policies and procedures to ensure employees provide services free from bias and error.</p>
<b>Competitive Behaviour</b>	<p>The category covers social issues associated with existence of monopolies, which may include, but are not limited to, excessive prices, poor quality of service, and inefficiencies. It addresses a company's management of legal and social expectation around monopolistic and anti-competitive practices, including issues related to bargaining power, collusion, price fixing or manipulation, and protection of patents and intellectual property (IP).</p>
<b>Critical Incident Risk Management</b>	<p>The category addresses the companies use of management systems and scenario planning to identify, understand, and prevent or minimize the occurrence of low-probability, high-impact accidents and emergencies with significant potential environmental and social externalities. It relates to the culture of safety at a company, its relevant safety management systems and technological controls, the potential human, environmental, and social implications of such events occurring, and the long-term effects to an organization, its workers, and society should these events occur.</p>
<b>Management of the Legal &amp; Regulatory Environment</b>	<p>The category addresses a company's approach to engaging with regulators in cases where conflicting corporate and public interests may have the potential for long-term adverse direct or indirect environmental and social impacts. The category addresses a company's level of reliance upon regulatory policy or monetary incentives (such as subsidies and taxes), actions to influence industry policy (such as through lobbying), overall reliance on a favorable regulatory environment for business competitiveness, and ability to comply with relevant regulations. It may relate to the alignment of management and investor views of regulatory engagement and compliance at large.</p>
<b>Systematic Risk Management</b>	<p>The category addresses the companies contributions to or management of systemic risks resulting from large-scale weakening or collapse of systems upon which the economy and society depend. This includes financial systems, natural resource systems, and technological systems. It addresses the mechanisms a company has in place to reduce its contributions to systemic risks and to improve safeguards that may mitigate the impacts of systemic failure. For financial institutions, the category also captures the company's ability to absorb shocks arising from financial and economic stress and meet stricter regulatory requirements related to the complexity and interconnectedness of companies in the industry.</p>

Human Capital	Category	DESCRIPTION
	Employee Engagement, Diversity & Inclusion	The category addresses a company's ability to ensure that its culture and hiring and promotion practices embrace the building of a diverse and inclusive workforce that reflects the makeup of local talent pools and its customer base. It addresses the issues of discriminatory practices on the bases of race, gender, ethnicity, religion, sexual orientation, and other factors.
	Employee Health & Safety	The category addresses a company's ability to create and maintain a safe and healthy workplace environment that is free of injuries, fatalities, and illness (both chronic and acute). It is traditionally accomplished through implementing safety management plans, developing training requirements for employees and contractors, and conducting regular audits of their own practices as well as those of their subcontractors. The category further captures how companies ensure physical and mental health of workforce through technology, training, corporate culture, regulatory compliance, monitoring and testing, and personal protective equipment.
	Labour Practices	The category addresses the company's ability to uphold commonly accepted labor standards in the workplace, including compliance with labor laws and internationally accepted norms and standards. This includes, but is not limited to, ensuring basic human rights related to child labor, forced or bonded labor, exploitative labor, fair wages and overtime pay, and other basic workers' rights. It also includes minimum wage policies and provision of benefits, which may influence how a workforce is attracted, retained, and motivated. The category further addresses a company's relationship with organized labor and freedom of association.

Table 3. Report-based inputs, their topic and focus.

Metric Name	Metric Code	Module	Category Name	Dimension Name	Pillar Name
Impact of climate risks and opportunities on the organization	empl_62800	Emissions Plus	Physical Impacts of Climate Change	Business Model & Innovation	E
Climate strategy and resilience planning	empl_62900	Emissions Plus	Physical Impacts of Climate Change	Business Model & Innovation	E
Climate risk management processes	empl_63100	Emissions Plus	Physical Impacts of Climate Change	Business Model & Innovation	E
Climate risk management integration	empl_63200	Emissions Plus	Physical Impacts of Climate Change	Business Model & Innovation	E
Whistleblowing support functions	esg_00201	ESG	Business Ethics	Leadership & Governance	G
Supplier bribery/corruption inspections or audits	esg_00301	ESG	Business Ethics	Leadership & Governance	G
Operations in low ranking TIOP Index countries	esg_00311	ESG	Business Ethics	Leadership & Governance	G

<b>Bribery/corruption monitoring</b>	esg_00401	ESG	Business Ethics	Leadership & Governance	G
<b>Competition related lawsuits</b>	esg_00500	ESG	Competitive Behavior	Leadership & Governance	G
<b>Bribery/corruption related lawsuits</b>	esg_00600	ESG	Business Ethics	Leadership & Governance	G
<b>Restrictions on gifts</b>	esg_00611	ESG	Business Ethics	Leadership & Governance	G
<b>Anti-bribery/corruption training</b>	esg_00701	ESG	Business Ethics	Leadership & Governance	G
<b>Money laundering monitoring</b>	esg_00721	ESG	Business Ethics	Leadership & Governance	G
<b>Anti-money laundering training</b>	esg_00731	ESG	Business Ethics	Leadership & Governance	G
<b>Money laundering related lawsuits</b>	esg_00740	ESG	Business Ethics	Leadership & Governance	G
<b>Tax related lawsuits</b>	esg_00760	ESG	Business Ethics	Leadership & Governance	G
<b>Fair competition policy</b>	esg_00801	ESG	Competitive Behavior	Leadership & Governance	G
<b>IP related lawsuits</b>	esg_00900	ESG	Competitive Behavior	Leadership & Governance	G
<b>Political contribution disclosure</b>	esg_00921	ESG	Competitive Behavior	Leadership & Governance	G
<b>Government lobbying</b>	esg_01021	ESG	Management of the Legal & Regulatory Environment	Leadership & Governance	G
<b>Government engagement</b>	esg_01031	ESG	Management of the Legal & Regulatory Environment	Leadership & Governance	G
<b>Community program management</b>	esg_01601	ESG	Human Rights & Community Relations	Social Capital	S
<b>Community infrastructure programs</b>	esg_01801	ESG	Human Rights & Community Relations	Social Capital	S
<b>Current or expected impacts on communities and local economies</b>	esg_01921	ESG	Human Rights & Community Relations	Social Capital	S
<b>Community grievance mechanisms</b>	esg_02001	ESG	Human Rights & Community Relations	Social Capital	S
<b>Community grievances</b>	esg_02010	ESG	Human Rights & Community Relations	Social Capital	S
<b>Grievances involving indigenous peoples</b>	esg_02020	ESG	Human Rights & Community Relations	Social Capital	S
<b>Senior management hired locally</b>	esg_02221	ESG	Human Rights & Community Relations	Social Capital	S
<b>Community engagement programs</b>	esg_02241	ESG	Human Rights & Community Relations	Social Capital	S
<b>Local purchasing</b>	esg_02251	ESG	Human Rights & Community Relations	Social Capital	S
<b>Indigenous peoples engagement programs</b>	esg_02261	ESG	Human Rights & Community Relations	Social Capital	S
<b>FPIC of indigenous peoples</b>	esg_02271	ESG	Human Rights & Community Relations	Social Capital	S
<b>Company loans</b>	esg_02401	ESG	Business Ethics	Leadership & Governance	G

<b>Management bonus non-financial performance goals</b>	esg_02901	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Long-term performance goals</b>	esg_03001	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Malus and clawback provision</b>	esg_03601	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Employees earning minimum wage</b>	esg_03800	ESG	Labor Practices	Human Capital	S
<b>Retention rate after parental leave</b>	esg_04700	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Gender pay gap</b>	esg_04970	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	G
<b>Shareholder's Approval on compensation</b>	esg_07101	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Corporate value creation disclosure</b>	esg_07121	ESG	Business Model Resilience	Business Model & Innovation	G
<b>Risk Committee</b>	esg_07711	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Risk committee independence</b>	esg_07720	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Audit committee independence</b>	esg_09500	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Audit committee</b>	esg_09601	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Code of Conduct</b>	esg_10311	ESG	Business Ethics	Leadership & Governance	G
<b>Auditor Opinion</b>	esg_11210	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Females in management level positions</b>	esg_23200	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Ethnic minorities in management level positions</b>	esg_23210	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Discrimination lawsuits or offences</b>	esg_23300	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Female employees</b>	esg_23810	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Females on the board</b>	esg_23900	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	G
<b>Supplier diversity criteria integration</b>	esg_24001	ESG	Supply Chain Management	Business Model & Innovation	S
<b>Environmental investments</b>	esg_25101	ESG	Business Model Resilience	Business Model & Innovation	E
<b>Environmental grievance mechanism</b>	esg_25501	ESG	Physical Impacts of Climate Change	Business Model & Innovation	E
<b>Environmental lawsuits or offenses</b>	esg_25600	ESG	Ecological Impacts	Environment	E
<b>Environmental fines</b>	esg_25700	ESG	Ecological Impacts	Environment	E
<b>NOx data disclosure</b>	esg_25810	ESG	Air Quality	Environment	E
<b>SOx data disclosure</b>	esg_25820	ESG	Air Quality	Environment	E

VOC data disclosure	esg_25830	ESG	Air Quality	Environment	E
PM data disclosure	esg_25840	ESG	Air Quality	Environment	E
Air quality emissions reduction targets	esg_25901	ESG	Air Quality	Environment	E
NOx and SOx emissions reduction programs	esg_26001	ESG	Air Quality	Environment	E
VOC emissions reduction programs	esg_26101	ESG	Air Quality	Environment	E
PM emissions reduction programs	esg_26201	ESG	Air Quality	Environment	E
GHG emissions reduction targets	esg_26401	ESG	GHG Emissions	Environment	E
Fleet emissions reduction	esg_26501	ESG	GHG Emissions	Environment	E
Emission trading scheme participation	esg_27001	ESG	GHG Emissions	Environment	E
Carbon pricing	esg_27011	ESG	GHG Emissions	Environment	E
Carbon price disclosure	esg_27020	ESG	GHG Emissions	Environment	E
Product/service enables environmentally responsible use	esg_27401	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Recyclable/reusable product design	esg_27501	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Recycled/reused raw materials policy	esg_27601	ESG	Materials Sourcing & Efficiency	Business Model & Innovation	E
Recycled/reused raw materials targets	esg_27611	ESG	Materials Sourcing & Efficiency	Business Model & Innovation	E
Recycled/reused raw materials disclosure	esg_27621	ESG	Materials Sourcing & Efficiency	Business Model & Innovation	E
Recycled/reused raw materials proportion	esg_27630	ESG	Materials Sourcing & Efficiency	Business Model & Innovation	E
Product return and recycling programs	esg_27701	ESG	Materials Sourcing & Efficiency	Business Model & Innovation	E
Toxic substances policy	esg_28001	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Sustainable palm oil production	esg_28011	ESG	Supply Chain Management	Business Model & Innovation	E
Sustainable Packaging policy	esg_28101	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Clean technology development	esg_28201	ESG	Business Model Resilience	Business Model & Innovation	E
Sustainable water products	esg_28301	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Renewable energy distribution/production proportion	esg_28500	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E



Noise emissions reduction product development	esg_28701	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Supplier environmental criteria integration	esg_29001	ESG	Supply Chain Management	Business Model & Innovation	E
Supplier environmental inspections or audits	esg_29011	ESG	Supply Chain Management	Business Model & Innovation	E
Supplier environmental negligence	esg_29101	ESG	Supply Chain Management	Business Model & Innovation	E
Products sourced from responsibly managed forests	esg_29201	ESG	Materials Sourcing & Efficiency	Business Model & Innovation	E
Proportion of labeled/certified forest products	esg_29300	ESG	Materials Sourcing & Efficiency	Business Model & Innovation	E
Animal welfare standards	esg_29611	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Antibiotic use	esg_29631	ESG	Customer Welfare	Social Capital	E
Animal welfare initiatives	esg_29641	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Habitat protection or restoration	esg_29701	ESG	Ecological Impacts	Environment	E
Palm oil sourcing disclosure	esg_29721	ESG	Supply Chain Management	Business Model & Innovation	E
Sustainable Palm oil sourcing	esg_29730	ESG	Supply Chain Management	Business Model & Innovation	E
Biodiversity impact reduction initiative	esg_29811	ESG	Ecological Impacts	Environment	E
IUCN Red List (operations)	esg_29821	ESG	Ecological Impacts	Environment	E
Protected areas (operations)	esg_29831	ESG	Ecological Impacts	Environment	E
Insurance or reserves for environmental restoration	esg_29841	ESG	Critical Incident Risk Management	Leadership & Governance	E
Deforestation policy	esg_29861	ESG	Ecological Impacts	Environment	E
Energy efficiency policy	esg_29901	ESG	Energy Management	Environment	E
Energy efficiency targets	esg_30001	ESG	Energy Management	Environment	E
Renewable energy use targets	esg_30101	ESG	Energy Management	Environment	E
Energy consumption per production volume	esg_30300	ESG	Energy Management	Environment	E
Property assets emissions reduction policy	esg_30601	ESG	Energy Management	Environment	E
Land assets sustainability	esg_30801	ESG	Materials Sourcing & Efficiency	Business Model & Innovation	E
Real estate sustainability certification	esg_30811	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
Waste related targets	esg_31001	ESG	Waste & Hazardous Materials Management	Environment	E

<b>Waste reduction program</b>	esg_31201	ESG	Waste & Hazardous Materials Management	Environment	E
<b>Waste produced</b>	esg_31400	ESG	Waste & Hazardous Materials Management	Environment	E
<b>Proportion of waste recycled</b>	esg_31600	ESG	Waste & Hazardous Materials Management	Environment	E
<b>Hazardous waste reduction programs</b>	esg_31701	ESG	Waste & Hazardous Materials Management	Environment	E
<b>Electronic waste reduction programs</b>	esg_31711	ESG	Business Model Resilience	Business Model & Innovation	E
<b>Hazardous waste produced</b>	esg_31900	ESG	Waste & Hazardous Materials Management	Environment	E
<b>Liquid non-water waste incident disclosure</b>	esg_32001	ESG	Critical Incident Risk Management	Leadership & Governance	E
<b>Oil spills</b>	esg_32010	ESG	Waste & Hazardous Materials Management	Environment	E
<b>Supply chain waste disclosure</b>	esg_32021	ESG	Supply Chain Management	Business Model & Innovation	E
<b>Water resource management policy</b>	esg_32201	ESG	Water & Wastewater Management	Environment	E
<b>Water related targets</b>	esg_32211	ESG	Water & Wastewater Management	Environment	E
<b>Water resource management programs</b>	esg_32221	ESG	Water & Wastewater Management	Environment	E
<b>Water recycling/reuse</b>	esg_32601	ESG	Water & Wastewater Management	Environment	E
<b>Water discharge non-compliance</b>	esg_32630	ESG	Water & Wastewater Management	Environment	E
<b>Water risk/opportunity acknowledgement</b>	esg_32641	ESG	Water & Wastewater Management	Environment	E
<b>Supply chain water disclosure</b>	esg_32661	ESG	Supply Chain Management	Business Model & Innovation	E
<b>Hydraulic fracturing</b>	esg_32680	ESG	Water & Wastewater Management	Environment	E
<b>Environmental project financing</b>	esg_32701	ESG	Product Design & Lifecycle Management	Business Model & Innovation	E
<b>Business disruption from strikes</b>	esg_33000	ESG	Labor Practices	Human Capital	S
<b>Working days disrupted from strikes</b>	esg_33020	ESG	Labor Practices	Human Capital	S
<b>Employee satisfaction survey</b>	esg_33301	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Employee turnover rate</b>	esg_33400	ESG	Labor Practices	Human Capital	S
<b>Flexible work arrangements</b>	esg_33501	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Human rights project financing</b>	esg_33921	ESG	Human Rights & Community Relations	Social Capital	S
<b>Human rights monitoring</b>	esg_34201	ESG	Human Rights & Community Relations	Social Capital	S
<b>Human rights training</b>	esg_34301	ESG	Human Rights & Community Relations	Social Capital	S

<b>Human rights inspections or audit results</b>	esg_34331	ESG	Human Rights & Community Relations	Social Capital	S
<b>Supplier human rights criteria integration</b>	esg_34401	ESG	Human Rights & Community Relations	Social Capital	S
<b>Supplier human rights negligence</b>	esg_34501	ESG	Human Rights & Community Relations	Social Capital	S
<b>Human rights collaborations</b>	esg_34611	ESG	Human Rights & Community Relations	Social Capital	S
<b>ILO Labour Standards</b>	esg_34711	ESG	Labor Practices	Human Capital	S
<b>Supplier code of conduct</b>	esg_34731	ESG	Supply Chain Management	Business Model & Innovation	S
<b>Violence or harassment lawsuits or offenses</b>	esg_34740	ESG	Labor Practices	Human Capital	S
<b>Employee freedom of association policy</b>	esg_34901	ESG	Labor Practices	Human Capital	S
<b>Modern Slavery Act statement</b>	esg_35011	ESG	Labor Practices	Human Capital	S
<b>Supplier code of conduct training</b>	esg_35201	ESG	Supply Chain Management	Business Model & Innovation	S
<b>Supplier inspections or audit results</b>	esg_35401	ESG	Supply Chain Management	Business Model & Innovation	S
<b>Supplier monitoring</b>	esg_35501	ESG	Supply Chain Management	Business Model & Innovation	S
<b>Supply chain lawsuits or offenses</b>	esg_35600	ESG	Supply Chain Management	Business Model & Innovation	S
<b>Industry organisation membership (labour rights)</b>	esg_35611	ESG	Labor Practices	Human Capital	S
<b>Health and safety certifications</b>	esg_35901	ESG	Employee Health & Safety	Human Capital	S
<b>Number of fatalities</b>	esg_36110	ESG	Employee Health & Safety	Human Capital	S
<b>Injury rate</b>	esg_36120	ESG	Employee Health & Safety	Human Capital	S
<b>Accident rate disclosure</b>	esg_36201	ESG	Employee Health & Safety	Human Capital	S
<b>Health and safety policy</b>	esg_36301	ESG	Employee Health & Safety	Human Capital	S
<b>Employee safety training</b>	esg_36401	ESG	Employee Health & Safety	Human Capital	S
<b>Health, safety, and emergency response training</b>	esg_36410	ESG	Employee Health & Safety	Human Capital	S
<b>Health and safety incident reduction</b>	esg_36501	ESG	Employee Health & Safety	Human Capital	S
<b>Health and safety lawsuits</b>	esg_36600	ESG	Employee Health & Safety	Human Capital	S
<b>Supply chain health and safety</b>	esg_36901	ESG	Employee Health & Safety	Human Capital	S
<b>Financial inclusion</b>	esg_37001	ESG	Access & Affordability	Social Capital	S
<b>Micro loans</b>	esg_37010	ESG	Access & Affordability	Social Capital	S

Low cost medicine accessibility	esg_37101	ESG	Access & Affordability	Social Capital	S
Diseases in developing countries	esg_37301	ESG	Access & Affordability	Social Capital	S
Access to education	esg_37421	ESG	Access & Affordability	Social Capital	S
Community food support	esg_37501	ESG	Access & Affordability	Social Capital	S
Access to WASH-services	esg_37511	ESG	Access & Affordability	Social Capital	S
Access to housing	esg_37601	ESG	Access & Affordability	Social Capital	S
Access to healthcare	esg_37701	ESG	Access & Affordability	Social Capital	S
Low-priced products/services	esg_37801	ESG	Access & Affordability	Social Capital	S
Chemical composition disclosure	esg_37901	ESG	Selling Practices & Product Labeling	Social Capital	S
Product withdrawal or recall	esg_38000	ESG	Product Quality & Safety	Social Capital	S
Product/service recalls and cases of non-compliance	esg_38010	ESG	Product Quality & Safety	Social Capital	S
Product related customer injury disclosure	esg_38061	ESG	Product Quality & Safety	Social Capital	S
New Car Assessment Programme (NCAP) Ratings for product fleet	esg_38070	ESG	Product Quality & Safety	Social Capital	S
FDA Warning Letters	esg_38100	ESG	Product Quality & Safety	Social Capital	S
Proportion of satisfied customers	esg_38300	ESG	Customer Welfare	Social Capital	S
Fair trade products	esg_38401	ESG	Supply Chain Management	Business Model & Innovation	S
Customer data protection	esg_38501	ESG	Customer Privacy	Social Capital	S
Customer related lawsuits or offences	esg_38700	ESG	Product Quality & Safety	Social Capital	S
Customer satisfaction measurement	esg_38801	ESG	Customer Welfare	Social Capital	S
Customer data breaches	esg_38910	ESG	Data Security	Social Capital	S
Complaints regarding customer privacy	esg_38920	ESG	Customer Privacy	Social Capital	S
Approach on Data security	esg_38930	ESG	Data Security	Social Capital	S
Customer data usage	esg_38940	ESG	Data Security	Social Capital	S
Cybersecurity standards and frameworks	esg_38960	ESG	Data Security	Social Capital	S
Product impact monitoring	esg_39101	ESG	Customer Welfare	Social Capital	S
Prohibition of Off label products use	esg_39120	ESG	Selling Practices & Product Labeling	Social Capital	S

<b>Responsible advertisement to vulnerable groups</b>	esg_39130	ESG	Selling Practices & Product Labeling	Social Capital	S
<b>Quality management system certification</b>	esg_39201	ESG	Product Quality & Safety	Social Capital	S
<b>Proportion of facilities certified</b>	esg_39211	ESG	Product Quality & Safety	Social Capital	S
<b>Responsible marketing/product labelling</b>	esg_39501	ESG	Selling Practices & Product Labeling	Social Capital	S
<b>Stakeholder privacy protection policy</b>	esg_39601	ESG	Customer Privacy	Social Capital	S
<b>Product health and safety benefits</b>	esg_39801	ESG	Customer Welfare	Social Capital	S
<b>Average hours of training per year per employee</b>	esg_40200	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Employee training costs</b>	esg_40510	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Proportion of employees with performance/career development reviews</b>	esg_40530	ESG	Employee Engagement, Diversity & Inclusion	Human Capital	S
<b>Auditor appointment period</b>	esg_40800	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Business continuity risks</b>	esg_41531	ESG	Critical Incident Risk Management	Leadership & Governance	G
<b>Business continuity plan</b>	esg_41541	ESG	Critical Incident Risk Management	Leadership & Governance	G
<b>Executive succession plan</b>	esg_41811	ESG	Systemic Risk Management	Leadership & Governance	G
<b>Supply chain traceability</b>	esg_41861	ESG	Supply Chain Management	Business Model & Innovation	S
<b>Director RPTs</b>	esg_41870	ESG	Business Ethics	Leadership & Governance	G
<b>Criminal directors/executives</b>	esg_41881	ESG	Business Ethics	Leadership & Governance	G
<b>MD&amp;A integrated reporting</b>	esg_41901	ESG	Management of the Legal & Regulatory Environment	Leadership & Governance	G

## Disclaimer

---

ESG Book is a limited liability company (Gesellschaft mit beschränkter Haftung) incorporated in Frankfurt am Main and organised under the laws of Germany with registered number HRB 113087 in the commercial register of the local court with its seat and business address at Zeppelinallee 15, 60325 Frankfurt am Main, Germany (hereinafter "ESG Book"). ESG Book, with its UK branch and local subsidiaries, is a provider of sustainability data and advisory services and operates the sustainability data platform ESG Book. ESG Book does not offer any regulated financial services nor products. This document is provided on a confidential basis by ESG Book and is for information purposes only; accordingly, it is not a solicitation or an offer to buy any security or instrument or to participate in any trading activities nor should it be construed as a recommendation or advice on the merits of investing in any financial product. THIRD PARTY INFORMATION. Certain information contained in this document has been obtained from sources outside ESG Book. While such information is believed to be reliable for the purposes used herein, no representations are made as to the accuracy or completeness thereof and neither ESG Book nor its affiliates take any responsibility for such information. To the extent this document contains any links to third party websites, such links are provided as a convenience and for informational purposes only; they do not constitute an endorsement or an approval by ESG Book of any of the products, services or opinions of the corporations or organization or individual operating such third party websites. ESG Book bears no responsibility for the accuracy, legality or content of the external site or for that of subsequent links. RELIANCE – ESG Book makes no representation or warranty, express or implied, as to the accuracy or completeness of the information contained herein, and accepts no liability for any loss, of whatever kind, howsoever arising, in relation thereto, and nothing contained herein should be relied upon. CONFIDENTIALITY. This document contains highly confidential information regarding ESG Book's strategy and organization. Your acceptance of this document constitutes your agreement to keep confidential all the information contained in this document, as well as any information derived by you from the information contained in this document and not disclose any such information to any other person. This document may not be copied, reproduced, in any way used or disclosed or transmitted, in whole or in part, to any other person.