



ESG Impact Review

ESG impact measure for corporates

A modular approach adapted to client needs



ESG risk and ESG impact

Scope's sustainability assessment differentiates between the ESG impacts and ESG risks of corporates ('double materiality'). The ESG impact represents the negative externalities that a corporate inflicts on the environment and society through its direct and indirect economic activity. ESG risk represents how ESG factors influence a corporate's profitability in both the short term and the long term. Scope's line of ESG products offers an impact-oriented ESG analysis of a corporate's activities.

Impact of ESG risk on a company



Impact of a company's economic activities on ESG



Scope's two ESG impact products

analyses a company's ESG impact through two modular stages with increasing levels of precision.

ESG Impact Review

The ESG Impact Review The ESG Impact Review uses a quantitative approach covering 11 fundamental ESG indicators over a universe of more than 20,000 corporates worldwide. In addition, there is a Scoring Tool for access to private companies' scores. For investors, the ESG Impact Review is adapted to report on both individual and aggregate impacts at portfolio level to explain the drivers of a corporate's and investment's adverse impacts.

ESG Impact Rating

The ESG Impact Rating is a product targeted to issuers. The rating results from the inputs and validation produced directly by the corporate and discloses the most granular indicators. This stage provides a deeper analysis of corporate impacts, including a downstream analysis and an assessment of positive contributions to the SDGs.



ESG Impact Review

Building a macroeconomic measure of corporate intangibles

Methodological highlights

Scope's ESG Impact Review is based on a quantitative macroeconomic model that captures the impacts of the upstream supply chain. The approach is based on multi-regional input-output modelling and is therefore independent of a corporate's sustainability reports. Scope analyses the negative ESG impact generated by a company's sites and upstream supply chain. The methodology is suitable for all company sizes.

- By relying solely on robust macroeconomic data instead of individually formatted company disclosures, the product creates comparability between different companies' measures of externalities.
- The monetisation of indicators creates more clarity around corporate priorities. Thereby, Scope ensures a transparent, impact-driven assessment without pre-defined global weights. The monetisation of impacts determines a materiality dependent of each corporate's specificities.
- Negative externalities pricing is based on a robust academic and institutional research literature review.
- The score goes far beyond the first level of the supply chain, with a comprehensive analysis of the upstream supply chain, from the raw materials to the final product or service.
- The quantitative model can be applied without interaction with the corporate and is independent of corporate sustainability reports or qualitative information.
- The analysis is transparent, explicitly acknowledging gaps and limitations. A step-by-step explanation on the data-processing clearly outlines how scores are generated.
- EU regulation requires the disclosure and transparency of sustainability policies; hence, the ESG Impact Review can support the transition to a compliant framework.



ESG Impact Review

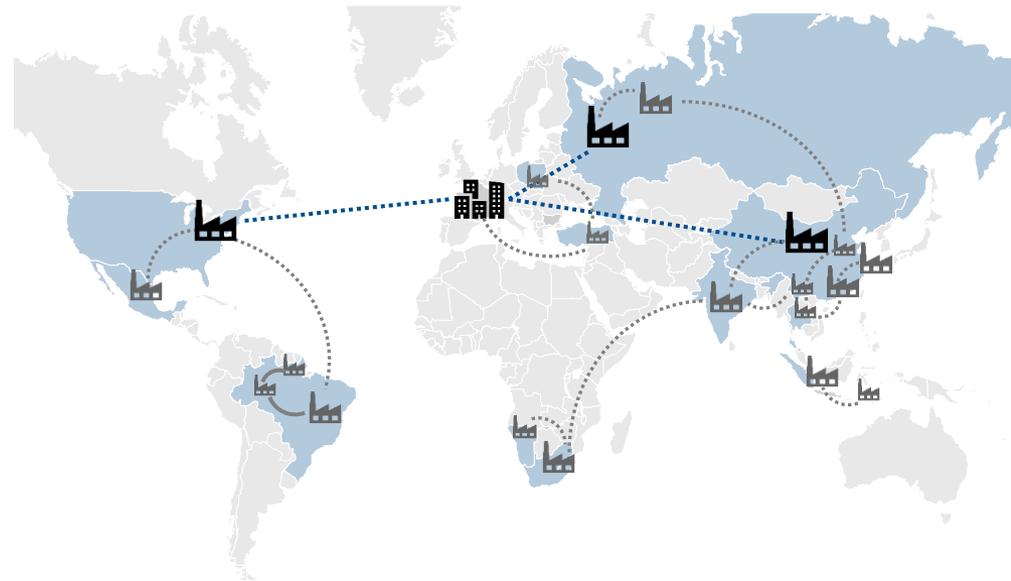
Building a macroeconomic measure of corporate intangibles

A transparent calculation

Scope's ESG Impact Review covers more than 20,000 companies worldwide. For each company, Scope produces an aggregate ESG score and the distinct E, S and G scores composed of the monetised values of 11 ESG indicators.

1. Changing the scope of the corporate assessment

The macroeconomic approach used by Scope applies a proxy that represents all costs and processes needed by a corporate to generate revenue, computed using a multi-regional input-output model. These global impacts generate country-sector matrices, which capture the average impact of a corporate's own sites and its environmental and social impacts across the entire supply chain. This calculation therefore reveals the impact of all economic activity in the supply chain. The relevance of this scope is shown by the supply chain impact of a global index like the MSCI World: 41% of generated externalities on average.





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2. Talking about ESG

After changing the perspective from the corporate to a combination of countries and sectors, including the upstream supply chain, the methodology describes economic interdependencies; environmental and social impacts come later. Scope calculates a series of weights, which is then combined with ESG data produced by established international institutions. This ESG data are available at both country and sector levels or just at country level.



3. Monetising to reflect materiality

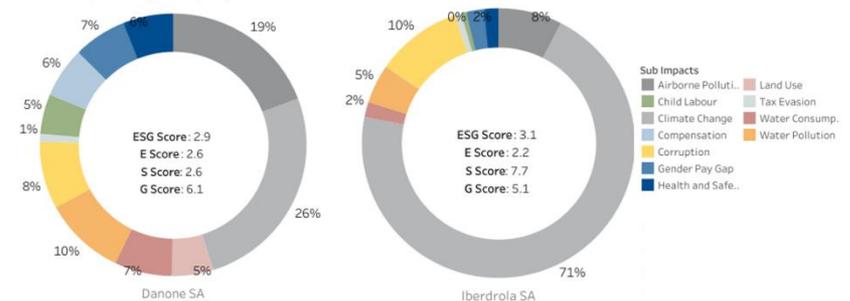
Ideally, the transformation of indicators into a score reflects each indicator's weight in the aggregation. The ESG Impact Review does not use fixed weights, recognising that each corporate has specific externalities, even within a sector.

The methodology relies on transforming physical units into a common monetary unit with a cost in euros. Once expressed as a common unit, the sum of those costs results in the aggregated externalities. The indicators are therefore not allocated a subjective weight; rather, an indicator's cost determines the size of its impact. Furthermore, the translation from physical units to a monetised unit allows for inter-indicator comparisons.

➔ if the corporate's most harmful impact stems from greenhouse gases, the deduced or induced cost of that externality will be higher than other costs.

These 11 indicators are individually monetised as the cost of the externality relative to each euro of revenue.

Detailed Impacts by Company in the Sector





ESG Impact Review

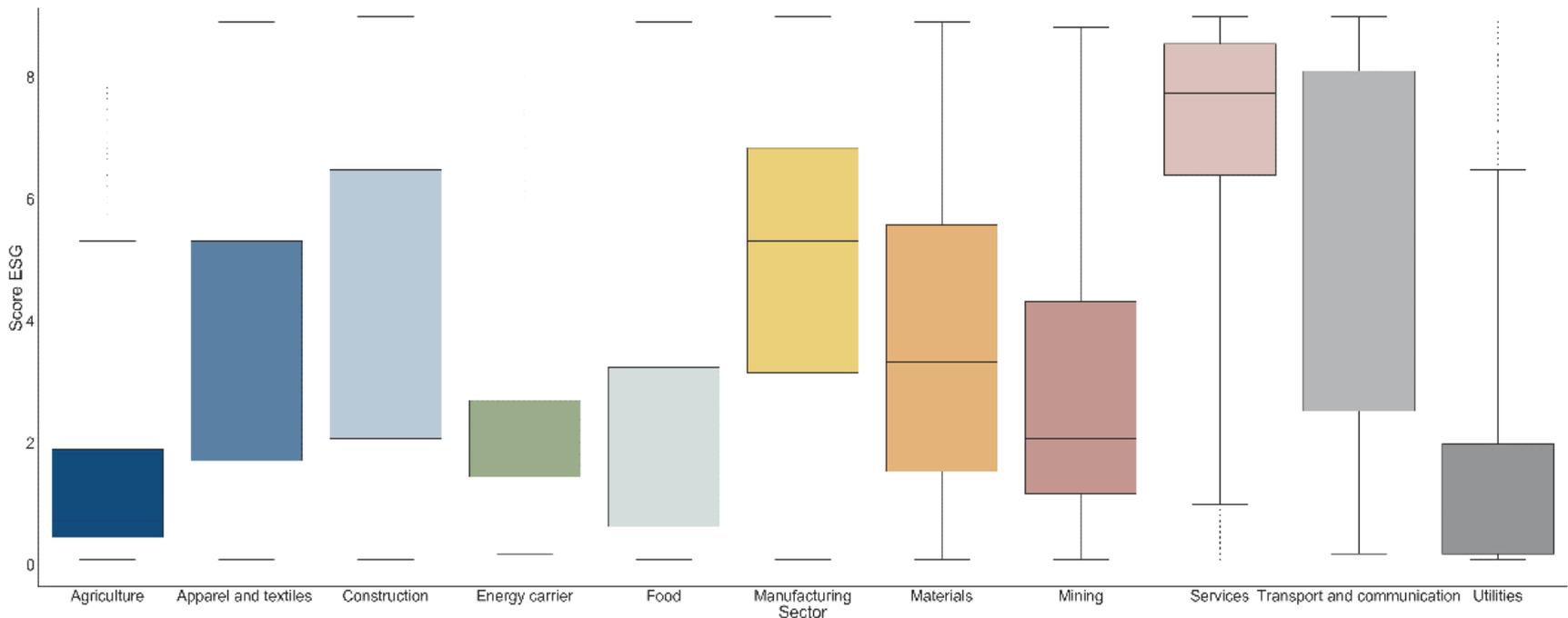
Building a macroeconomic measure of corporate intangibles

4. Creating a clear measure underlying the score

Depending on a company's supply chain data and asset and revenue segmentation, the ESG score is computed as a percentile ranked against all corporates in Scope's universe. This yields an

absolute ranking that demonstrates sectoral differences but also displays considerable variation across sub-industries and corporates within sectors.

Scope ESG Impact Review Scores by Sector





ESG Impact Review

The relevance of the supply chain

The relevance of the supply chain

Creating a comparable scope

When comparing impacts of corporates, it is crucial to have similar scopes. Integrating the supply chain helps making the scope of the analysis identical across every corporate.

➔ If comparing two distributors of oil and gas while one of the companies derives its revenue only from transporting and the other derives revenues from extracting, refining and transporting, their profiles would be very different. These differences result in varying ESG impact intensities. Scope's model covers roughly 450 sectors in 47 countries or regions to ensure the highest level of granularity in the impact measure.

Reaching the hidden negative impacts

The scope of the analysis also accounts for all activities in a corporate's supply chain. Harmful externalities are found not only in core activities but also far up the supply chain. Scope therefore examines impacts beyond those from core activities to ascertain whether a company's claims of sustainability can be justified.

➔ Tesla produces lithium-ion batteries using the mineral cobalt, which is primarily found in the Democratic Republic of Congo, where child labour is prevalent. The US Department of Labor has found that "as many as 35,000 of the Democratic Republic of Congo's 255,000 artisanal cobalt miners are children". Between 15% and 30% of cobalt from the Democratic Republic of Congo is estimated to come from artisanal and small sites. The supply chains of companies can be so far-reaching that tracing the impact of daily activities becomes impossible. Therefore, revealing the impacts on a larger scale and allowing companies to backtrack and improve their negative ESG impact are helpful. Tesla recently announced it will move towards zero-lithium production. This example shows that making a supply chain more transparent does not usually lead to a shift of impacts; rather, it increases demand for innovation and transgression towards new business models.



ESG Impact Review

How we are different

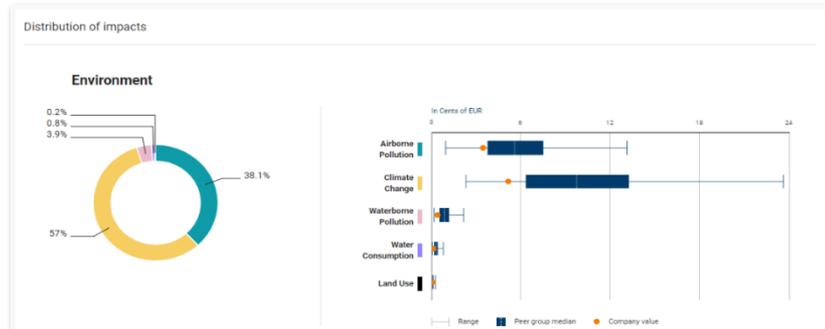
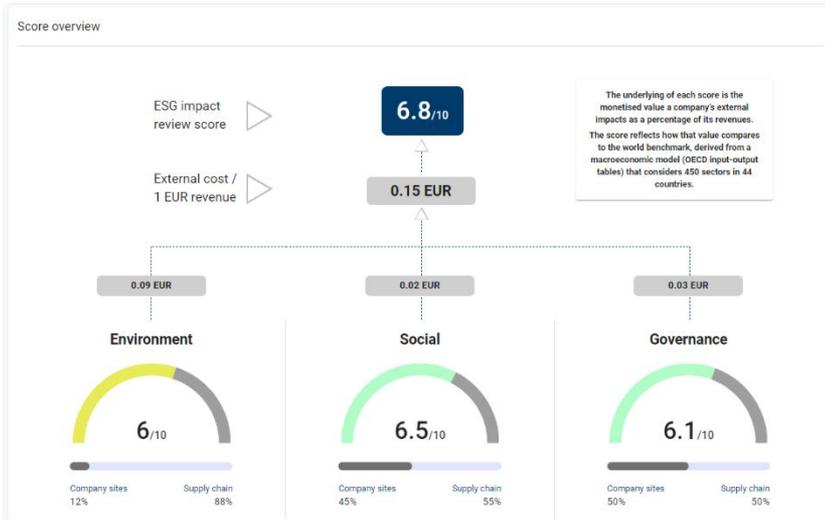
How we are different

- Scope's impact products account for activities across the entire supply chain.
- The analyses assess materiality based on monetisation instead of assigning subjective weights to impacts.
- Scope's approach works independently of a corporate's self-disclosed data thus allowing to assess companies of any size.
- ESG Impact Review Scores yield the cost of the external impact for each euro of revenue for 11 indicators, showing the best way a corporate can improve its score.



ESG Impact Review

Case study: ESG impact score - Volkswagen



Insight: Volkswagen's monetised E, S and G costs add up to 15 cents per euro of revenue generated by its activity. Ranked against all the existing corporates in all sectors and all countries, this results in a total score of 6.8 out of 10. 10 being the highest sustainability score.

With 9 cents per euro of revenue coming from the E dimension, the five E indicators generate a higher cost than the S and G indicators. The E aspect scores the lowest, highlighting it as Volkswagen's weakest pillar compared with the entire universe of corporates. Accounting for 8 of the 9 cents, the main source of Volkswagen's environmental impact originates from its supply chain.

Compared to its peer group of automotive companies, Volkswagen is in the top quartile for its ESG, E, S and G scores

- As Volkswagen's E score contributes the most to its ESG cost, Scope examines the distribution of environmental impacts more closely. Climate change, representing greenhouse gas emissions followed by airborne pollution (sulphur and nitrogen oxides, particulate matter and toxic organic substances) make up the largest shares of the environmental impact - with respectively 57% and 38%.
- Still, for both negative impacts, Volkswagen performs better than its peers.
- The graph below shows the environmental impacts by the sector of the supply chain. We can observe the importance of the processes relative to materials and energy regarding environmental externalities.
- 88% of Volkswagen's environmental externalities occur outside of its own sites. This graph shows that Volkswagen's supply chain environmental externalities stem primarily from the materials and utilities sectors rather than manufacturing, which is how Scope classifies the company based on its end product.



ESG Impact Review

Case study: ESG impact score - Volkswagen

Scope's ESG products quantify corporate impacts to society on a global scale, helping investors make informed decisions.

Upcoming EU regulation

Under the umbrella of the Action Plan for Financing Sustainable Growth, the EU Commission is enforcing a range of requirements impacting corporates and financial actors, independently of their focus on sustainability.

Regulatory requirements will encompass the EU Taxonomy along with the Do Not Significantly Harm Principles and minimum social safeguards. The new standards also require eligibility evaluations against taxonomy benchmarks to be performed on investments to qualify them as green as well as sustainability reporting on behalf of corporates (NFRD) and financial market participants (SFDR). The upcoming Green Bond Standard aims to tackle the lack of standard criteria on selecting the green use of proceeds.

Scope's ESG products are tailored to assist both financial actors and corporates in meeting the new obligations that they will face in the coming years.

Example of Volkswagen environmental impacts by process within the company and in the supply chain

Environment Impacts:

Materials Environment Impact: 8.36B	Utilities Environment Impact: 5.91B	Mining Environment Impact: 3.92B	Manufacturing Environment Impact: 1.96B	



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