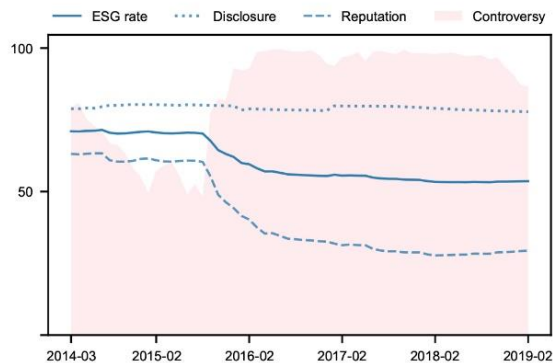


ESG rate	Grade risk mitigation	Global rank	Industry rank
54 Top 17%	B d +	1102 (-)	39 (-)
<i>ESG rate 0 - 100</i> <i>Percentile rank in full universe</i>	<i>A to D: position in ESG rating</i> <i>a to d: risk (controversy intensity)</i> <i>+/-: risk mitigation</i>	<i>Ranking in full universe of 6595 companies</i> <i>(change from last month)</i>	<i>Ranking in industry (change from last month)</i> <i>Companies in industry: 116</i>

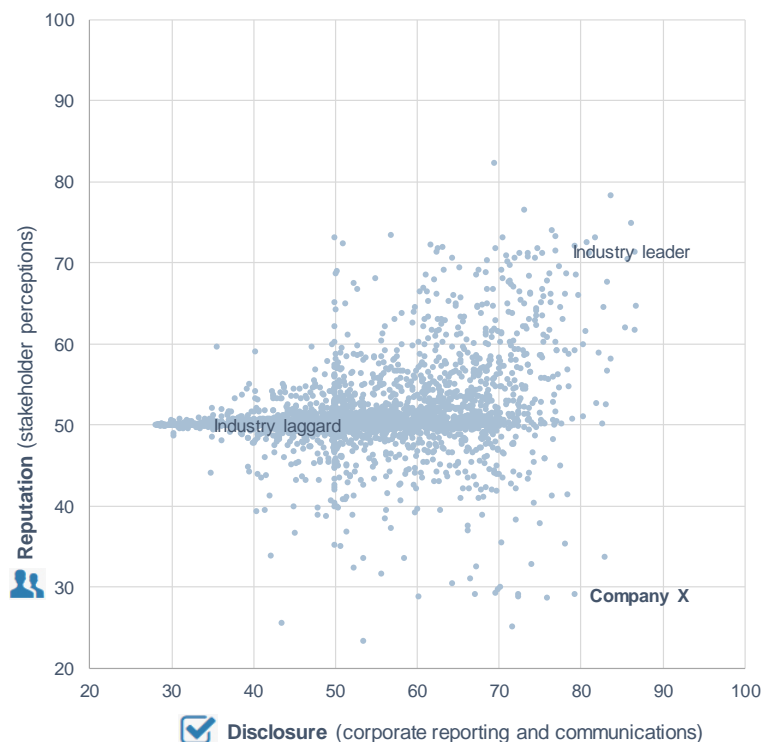
Company X registers a fair ESG performance with a grade of B translating an ESG rate of 54 (top 17% in full universe). The level of risk is d due to a very high controversy intensity which is not mitigated by the overall ESG performance. Company X ranks #1102 in the full universe of 6595 companies and #39 in Industry X.

	Rate 0-100	<input checked="" type="checkbox"/> Disclosure	<input type="checkbox"/> Reputation
ESG	54	78	29
Environment	63	83	42
Social	53	84	23
Governance	47	68	26
Controversy	87	<i>The controversy score reflects the intensity of current controversies</i>	



The ESG rate integrates data publicly reported and communicated by companies (**disclosure**), and narrative content reflecting the perceptions of stakeholders such as the media and NGOs (**reputation**). The heatmap above shows how the company performs in the Environment, Social and Governance categories. The evolution of its ESG rate is shown on the right. The scatter below compares the company and the industry leader and laggard.

Company in universe

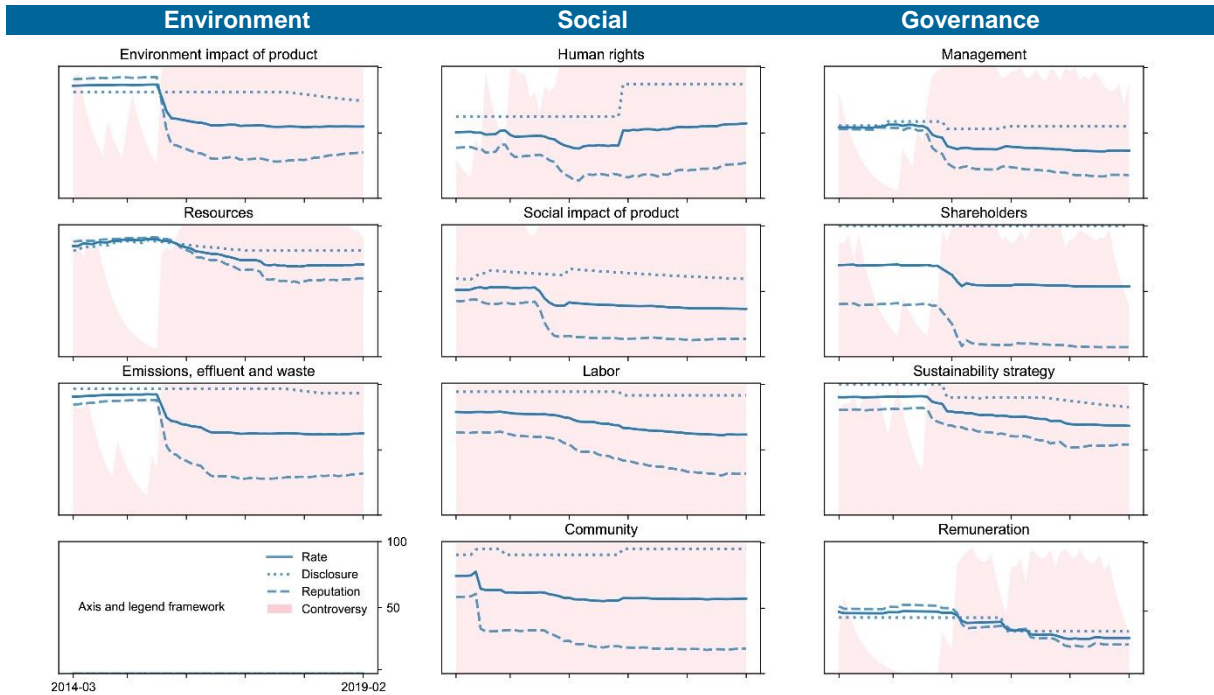


Sensitive activities

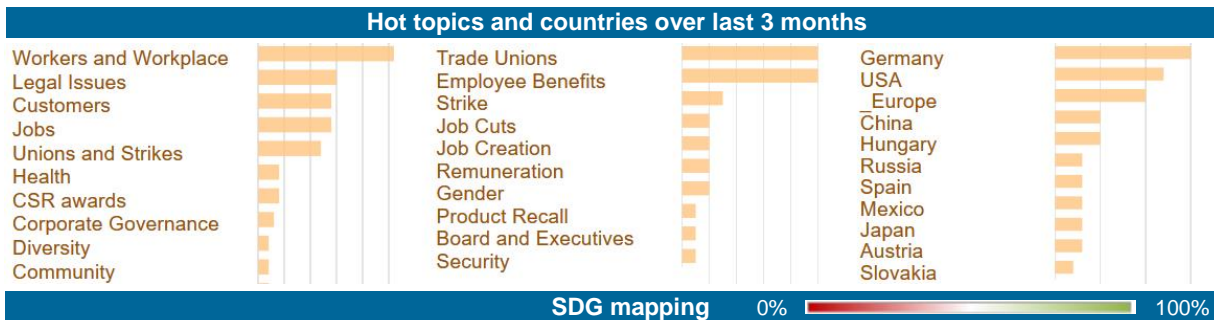
Activities	Y / N	> 5%
GMO Products	<input type="checkbox"/>	<input type="checkbox"/>
Agrochemical Products	<input type="checkbox"/>	<input type="checkbox"/>
Nuclear	<input type="checkbox"/>	<input type="checkbox"/>
Alcohol	<input type="checkbox"/>	<input type="checkbox"/>
Tobacco	<input type="checkbox"/>	<input type="checkbox"/>
Armaments	<input type="checkbox"/>	<input type="checkbox"/>
Cluster Bombs	<input type="checkbox"/>	<input type="checkbox"/>
Anti-Personal Landmines	<input type="checkbox"/>	<input type="checkbox"/>
Gambling	<input type="checkbox"/>	<input type="checkbox"/>
Pornography	<input type="checkbox"/>	<input type="checkbox"/>
Contraceptives	<input type="checkbox"/>	<input type="checkbox"/>
Abortifacients	<input type="checkbox"/>	<input type="checkbox"/>

Information on sensitive activities is provided to investors applying exclusions.

Source: Thomson Reuters.



For each of the 11 dimensions distributed in the E, S, G categories, a rate from 0 to 100 is calculated. The final ESG rate results from the average of rates measured for each dimension.



The ESG data has been filtered and recoded with the Sustainable Development Goals (SDGs). The size of boxes reflects the volume of data, or the relevance of each SDG to the company, while the color translates the positive / negative sentiment of this data, or stakeholder perceptions, from red (min 0%) to green (max 100%).

Methodology overview

The Covalence approach is based on a diversity of sources of information and relies on web monitoring and artificial intelligence together with human analysis.

To produce ESG ratings, we combine a measure of **disclosure** based on ESG indicators reported by companies and sourced from Thomson Reuters as well as on corporate communications, and a **reputation** score, translating the perceptions of stakeholders such as the media and NGOs, both positive (endorsements) and negative (controversies).

Level of analysis		Type of data	Sources	Illustrations
 Disclosure	Reporting	ESG and SDG indicators disclosed by companies Sourced from provider	Companies	<ul style="list-style-type: none"> • H&S policy in supply chain? YES/NO • % of women on board • Total water use / Million in revenue \$, etc.
	Communications			
 Reputation	Endorsements	Narrative content Processed using in-house semi-automated analysis	Stakeholders	
	Controversies		Media, NGOs, trade unions, governments, etc.	Negative stories on ESG issues, sustainability, CSR, ethics

Disclosure: integration of indicators published by companies

An increasing number of companies publish ESG indicators. These indicators are communicated in absolute numbers (e.g. CO2 emissions in tons), in ratios (e.g. % of women on the Board) or in Boolean terms (e.g. existence of a Health and Safety policy in the supply chain: yes / no). Since 2016, companies have also started disclosing indicators relevant to the Sustainable Development Goals (SDGs) to reflect their positive impacts on society and the environment. Covalence acquires this data from external providers and integrates it into its proprietary ranking system.

Announced Layoffs	1 127
Strikes	FALSE
Women Employees	35.1%
New Women Employees	41.7%
Women Managers	37.5%
HRC Corporate Equality Index	90
Flexible Working Hours	TRUE

Self-reported ESG and SDG indicators provide useful information on policies, processes and commitments. They respond to increasing demands for more transparency in the way a company conducts its business. However, the disclosed data is not sufficient to produce a balanced assessment. It is usually highly aggregated, mainly reporting global performance while providing little insight on local practices. It can also be positively biased, celebrating achievements and minimizing problems. There are data gaps. The use of additional data from third-party sources is therefore needed to document the perception of stakeholders and shed light on local situations.

Reputation: artificial intelligence enabling stakeholder analysis

Stakeholders such as NGOs, governments, trade unions and the media describe the role and activities of companies in positive and negative terms generating either endorsements or controversies. Since 2001, Covalence has specialized in the semi-automated analysis of such narrative content. This expertise materialized in the award-winning EthicalQuote reputation index.



We use data collection and classification tools relying on artificial intelligence techniques (machine learning, natural language processing) in order to analyse the narrative content. This process is reinforced by human interventions to classify the content in terms of polarity (positive/negative) and criteria. Our team of analysts thoroughly checks entries proposed by the software, thus ensuring high curation standards. Only sources that are publicly identified and available online are considered.

Criteria

Covalence first uses a set of 50 criteria inspired by the [Global Reporting Initiative's](#) sustainability reporting guidelines. These criteria serve to classify the narrative content which is gathered thanks to our semi-automated search process using a broad set of sources.

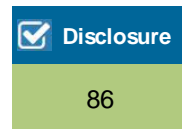
The data is then recoded with hundreds of topics and sub-topics and organized into 11 dimensions within 3 categories: Environment, Social, Governance.

The data is also classified with the 17 Sustainable Development Goals to show companies' mapping to the SDGs to provide insightful material for impact analysis and to support thematic investment strategies.

Finally, Covalence data can also be classified with other metrics such as the Principles of the [UN Global Compact](#) or the [Peacebuilding Business Criteria](#) developed by the [PeaceNexus](#) foundation.

Disclosure score

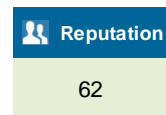
Hundreds of ESG indicators reported by companies are provided to us by Thomson Reuters. For each selected indicator, the data is normalised into a 0-100 scale. Reporting scores are calculated for each of the 11 dimensions.



In the disclosure score we also consider corporate communications (narrative content published by companies: web pages, press releases, etc.), as a bonus: if it is higher than the Reporting score, the Corporate communications score is considered and used as the disclosure score. If the corporate communications score is lower than the reporting score, then it is only the Reporting score that constitutes the disclosure score.

Reputation score

The basic metrics used by Covalence to measure companies' ESG reputation are quantities of news items gathered on the web (texts, web pages) from third party sources that can be coded as having a positive (endorsements) or a negative orientation (controversies) towards named companies (polarity, sentiment).



Here is how we calculate reputation scores:

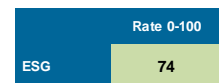
Total news = positive news + negative news

A score is given by the ratio between positive news and total news. For example, if a company has total news = 100, negative news = 40, positive news = 60, the score is $60 / 100 = 60\%$. A historical erosion factor is applied to the quantities of positive and negative news with recent articles weighting more than older ones. In the case of scores relying on a low volume of information, a threshold is applied to bring scores close to 50% (neutral score).

Scores are calculated within each of the 11 dimensions.

ESG rate: combining disclosure and reputation scores

For each of the 11 dimensions, an average is calculated between the disclosure and the reputation scores. We then have rates for each dimension, as well as for the Environment, Social, and Governance categories.



The final ESG rate is given by the average of the rates calculated for each of the 11 dimensions. The ESG rate is then translated into Z-scores (based on standard deviation from the mean value) to generate grades from A to D.

Controversy score

Such a score is also provided, although it is not taken into account in the calculation of the ESG rate. Rather, it offers an additional measure to investors, analysts, and companies. The controversy score reflects the intensity of current controversies naming a company, as indicated by the a to d grade. The + / - indicates whether or not the overall ESG performance mitigates the risk.

