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Morningstar Sustainalytics is a leading ESG research, ratings, and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Morningstar Sustainalytics works with hundreds of the world's leading asset managers and pension funds who incorporate ESG and corporate governance information and assessments into their investment processes. The firm also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices, and capital projects. With 17 offices globally, Morningstar Sustainalytics has more than 1,800 staff members, including more than 800 analysts with varied multidisciplinary expertise across more than 40 industry groups. For more information, visit www.sustainalytics.com.

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MORNINGSTAR SUSTAINALYTICS



SUSTAINALYTICS' CONTROVERSY RATINGS

Controversy Assessment

Sustainalytics assesses companies' involvement in incidents with negative environmental, social and governance (ESG) implications. Controversy involvement is one key measure of ESG performance that may inform the investment decisions of our clients.

The Controversy Rating

The Controversy Rating reflects a company's level of involvement in issues and how it manages these issues. The diagram below provides an overview of how the Controversy rating is reached:



INCIDENT

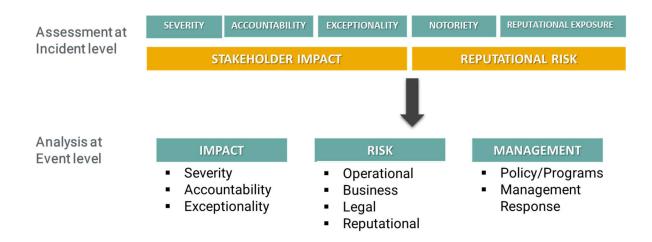
An Incident is the building block to a Controversy Rating. It is a company activity with unintended and/or undesired negative environmental and/or social impacts on stakeholders. Incidents are primarily assessed based on the negative environmental and/or social impact of the company activity as well as the reputational risk that this activity poses to the company.

Incidents are tracked through various media and NGO sources and typically inform the Controversy Rating for a period of three years. In exceptional cases, long-running high-impact incidents continue to inform the Controversy Rating for more than three years until it no longer poses a risk to the company.

EVENT

Events are series of isolated or related incidents that pertain to the same ESG issues. Events are classified into 40 Event Indicators which speak to these ESG issues. For example, a series of employee strikes in various locations of a company's operation forms an event under one of the event indicators, "Labour Relations". To assess an Event, an analyst looks at the series of underlying incidents from a holistic perspective and assesses based on the following factors;

- Impact: Negative impact that the incidents have caused to the environment and society;
- **Risk:** Business risk to the company as a result of the incidents;
- Management: A company's management systems and response to incidents



An event is assessed on a scale of 5 levels:

Category 5 – Severe	The Event has a severe impact on the environment and society, posing serious business risks to the company. This category represents exceptional egregious corporate behavior, high frequency of recurrence if incidents, very poor management of ESG risks, and a demonstrated lack of willingness by the company to address such risks.
Category 4 – High	The Event has a high impact on the environment and society, posing high business risks to the company. This rating level represents systemic and/or structural problems within the company, weak management systems and company response, and a recurrence of incidents,
Category 3 – Significant	The Event has a significant impact on the environment and society, posing significant business risks to the company. This rating level represents evidence of structural problems in the company due to recurrence of incidents and inadequate implementation of management systems or the lack of.
Category 2 – Moderate	The Event has a moderate impact on the environment and society, posing moderate business risks to the company. This rating level represents low frequency of recurrence of incidents and adequate or strong management systems and/or company response that mitigate further risks.
Category 1 – Low	The Event has a low impact on the environment and society, and risks to the company are minimal or negligible.

CONTROVERSY

An event or aggregation of events relating to an ESG topic. The highest Event rating under a controversy indicator automatically becomes the Controversy Rating. Controversy ratings also follow the five-level hurricane scale shown above.

HOW INCIDENT SCORES AND EVENT RATINGS RELATE

Incident scores form the base of the Event Rating and provide an indication of the severity of the impact of an issuer's misconduct on the environment and/or society, as well as the reputation risk generated by the misconduct. Sector analysts apply an additional layer of analysis at the Event level, which means that <u>Incident scores are not the final determinant of Event Ratings</u>. Incidents scores may be overridden to get to the final Event Rating, because of additional assessment criteria applied to the Event, which includes preparedness, company response, trend of similar incidents and business impact.

The table below shows the Incident Score – Event Rating Framework, which serves as a guide to help analysts determine the Event Rating:

Incident Scores	Event Rating
1 – 2	Category 1
3 – 4	Category 2
5 – 6	Category 3
7 – 8	Category 4
9 – 10	Category 5

Outlook

The Outlook is a forecast of how an Event Rating will evolve over a 12 to 24-month period based on a set of criteria such as the company's risk factors, its management systems, and the external political and business environment. The Outlook is part of the Controversy research but does not inform the Controversy Rating.

Ratings Reviews

The Controversy Rating is reviewed by the assigned analyst on an ongoing basis. New incidents with high impact or risk scores or new corporate developments may lead to either an upgrade or a downgrade. A significant rating change is reviewed and signed off by a committee before it is implemented.

A full review of a company's Controversy Ratings is carried out by analysts at least every 12 months as part of the annual update of a Company ESG Report.

Oversight

Oversight of controversy ratings is conducted at two levels:

1) Events Oversight Committee (EOC): A four-member committee that reviews significant category changes before they are implemented. Significant category changes refer to either a downgrade from any category level to Category 4 or 5, or an upgrade from Category 4 or 5.

2) Alerts Team: All Category changes are reviewed by the Alerts Team, which coordinates the delivery of the bi-weekly alerts.

Bi-weekly Alerts Service

Clients can enable the Alerts Service on their subscribed universes from Global Access, to receive an overview of Category changes and Outlook changes occurred in the previous two weeks. The delivery of alerts is on the 1^{st} and the 16^{th} of every month via email with an excel file attachment.

Incidents Assessment

DEFINITION

An incident is a record of an activity by a company that may have unintended and/or undesired negative sustainability impacts on the environment, society or other stakeholders. An incident is tied to one company, one location and one date. The corporate "activity" creating a negative impact can be a single incident (i.e. a mine explosion) or an ongoing activity (the use of child labour in factories).

An *incident chain* consists of an *initial incident* as well as possible *incident updates* and *news updates*. The first mention of a negative activity by a company will generate an *initial incident*. *Incident updates* are created to capture subsequent developments that result in an assessment change. **News updates** are created when subsequent information is published about the negative activity, which is deemed essential for the cohesion of the incident chain, but does not result in any change in impact and/or risk scores.

Incidents are automatically assigned to an event indicator using tags. Sustainalytics currently covers 47 incident types.

Example:

Controversy Indicator	Event indicator	Incident tags (not available in company profiles)
Operations Related Controversies or Incidents	Conservation and Land	Environment - Other
	Use	Land Use and Biodiversity
	Emissions, Effluents and Waste	Degradation & Contamination (Land)
		Discharges and Releases (Water)
	and waste	Emissions to Air
	Energy Use and GHG	Energy Use and Greenhouse Gas
	Emissions	Emissions
	Water Use	Water Use

INCIDENT ASSESSMENT STAGES

1. **News Screening:** Controversy analysis begins with a news screening of issuers to capture news that carry ESG risks for issuers. A daily news screening of Sustainalytics' coverage universe is conducted by a dedicated team of analysts who screen reputable international and local media sources, social

media, specialized publications, and non-government organizations. Our intelligent, learning algorithms search through approximately 60,000 different sources, filtering the news feed via *Lexis Nexis*. We capture news in real-time and screen them the following morning (European time).

2. **Incidents creation**: A news report of an issuer's alleged or actual misconduct with ESG implications is processed as an Incident within 72 hours from the news publication.

INCIDENTS ASSESSMENT CRITERIA

An Incident is assessed on two criteria – *sustainability impact* and *reputational risk* – and each assessment criteria is scored on a scale of 1 to 10.

Incident Assessment Criteria	Assessment Factors
	Severity of the impact
Sustainability Impact	Accountability of the company
	Exceptionality of the company's involvement
Deputational Dick	Notoriety
Reputational Risk	Exposure

1. The severity of the incident

The severity of an incident is assessed according to the depth, breadth, and duration of the incident. Depth measures the nature of the incident (low, medium, high) in environmental, social and governance terms. Breadth measures how broad/ widespread the impact of the incident is in environmental, social and governance terms. The duration of an incident measures the period during which the impact of the incident was/is felt by stakeholders, as well as the period it takes to absorb or reverse it. Guiding questions that are considered under depth, breadth, and duration include:

- Did the incident impact a community or society's ability to function economically, politically, culturally?
- Were there breaches of legislation or violation of international norms?
- How many people were affected?
- How serious was the impact? Have there been fatalities, injuries, etc.?
- Over what time period did the incident occur, or will people continue to be affected?

2. Degree of accountability

Accountability refers to the specific entities (parent companies, subsidiaries, joint ventures, suppliers) that are accountable for the incident, the level of involvement (direct or indirect) and the level of impact (based on company ownership).

Guiding questions that are considered under accountability include:

- What is the nature of the incident and how closely is the company linked to the incident?
- What is the relation between the company and those responsible or accused of relevant violations?
- Is the company itself responsible, or is a subsidiary or supplier responsible?

 $^{^{1}}$ Lexis Nexis is a leading news aggregator and partner of reputable media providers, including BBC and Reuters.

- Is involvement direct or indirect (i.e. is the company directly accountable for the impact or there isn't
 a direct connection between the company and the impact but the company had the leverage to avoid/
 reduce the impact)?
- What is the degree of control the company or management had to prevent the incident from occurring in the first place?
- Is the company at all in a position to prevent such incidents from occurring again?

3. Degree of exceptionality

Exceptionality measures the degree (low, medium, high) to which the incident corresponds with industry patterns of corporate behavior.

Guiding questions that are considered under exceptionality include:

- Are other companies involved in similar incidents in the country or in the sector? If so, is there something that makes this case stand out?
- Is exceptionality supported by quantitative factors, i.e. fines/penalties, lawsuits, settlements, number
 of fatalities and/or injuries, magnitude of damage (e.g. volume of spill), number of products
 affected/recalled, number of customers affected, etc.?

4. Reputational risk

Reputational risk is assessed in relation to the degree of **notoriety** and **exposure** resulting from an incident. Notoriety measures the degree to which an incident has been covered by the media. Sustainalytics' assessment framework takes into account parameters such as the frequency of published news items covering the incident, the reach and relevance of the reporting media sources and the tone of the news item(s). Exposure considers the extent to which companies are exposed to further ESG-related risks through company involvement in a controversy and the extent of reputational damage attached to a company's business ethics violations, where applicable.

Guiding questions that are considered under exposure include:

- Is the incident linked to key ESG issues for the industry and likely to generate stakeholder concern?
- How often do news sources report on the incident, and how reputable are these sources?
- Have the company's ethical violations compromised stakeholder trust or are they likely to do so in the future?
- What is the level of involvement of company staff in these violations? Was the incident accompanied by ethical violations such as bribery, corruption, fraud, etc.?
- Was or should management have been aware of the incident?

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