Risk assessment: Scoring Methodology

This pager explains the risk scoring methodology used to assess identified and classified risks. The methodology used to develop the Raw Material Outlook (RMO) portal is summarised in the homepage of the public section of the portal, see here.

The assessment was made by applying a tailored version of the Levin Sources ESG Materials Score[1]. It is important to note that the risk prioritization did not involve additional input from external stakeholders as it was considered out of scope for this phase. However, it is particularly advised that when applying an United Nations Guiding Principles (UNGP) approach to the process, more targeted interviews with experts and affected stakeholders, should take place in order to further inform and validate the assessment of salience.

The methodology, aligned with the UNGPs, assesses **salience**[2] of risks through assessments of **severity** and **likelihood**, which is both qualitative and quantitative. The assessment is based on all the data collected on materialised evidences and on market intelligence data. The outcome is a risk score per risk issue that is measurable and quantifiable. We have applied the methodology also to environmental impacts. The risk scores for each risk issue been calculated in the following way:

i) **Severity**: evaluated as a compound score of:
- Scale (i.e. gravity of impact)
- Scope (number of individuals affected)
- Irremediability (the ease with which those impacted could be restored)

A detailed explanation on the sub-scoring of these three parameters can be found in Table 2. The assessments of these three parameters, according to the data collected, have been combined into an overall severity score, see explanations in Table 3.

ii) **Likelihood:** calculated on a geographical basis, using available benchmarks and human rights databases to determine how likely a particular risk is to occur in a particular country. These benchmarks are the same for all countries to ensure comparability and consistency, see benchmarks used in Table 4. All benchmarks were normalised to score between 1 and 5. Likelihood sub-scorings of top countries in each value chain stage have been combined into an overall likelihood score.

Table 1 Parameters used to evaluate severity

	Explanation	Scoring	Notes
Scale	Life or long-term health threatening	3	Vulnerability needs to play an integral part in the scale assessment. The particular context of a person (circumstances, ability to respond to change, etc.) may influence on how serious the scale of the impact might be to that person.
	Non-life or health threatening, but tangible infringement of access to basic life necessities or freedoms (e.g. education, livelihood, etc.)	2	
	All other impacts	1	
Scope	Affects both human rights and the environment	3	In addition to these quantifiable numbers, it is important to not only consider the absolute number of people affected, but the individual workers and community members that are impacted.
	Affects human right or the environment	2	
	Affects a small number of individuals	1	
Irremediability	High - it is impossible to restore the original human rights impacts (if there is loss of life for example)	3	

	Moderate - there is a remedy option, but difficult and over a very long time	2	
	Low - impact is reversible and quick to recover	1	

Table 2. Overall scoring of severity based on parameters sub-scoring

TOTAL SCORE	Determined by parameter Scoring	General explanation
5	Sum of parameters is 8 & 9	**Catastrophic** - Loss of life, irreversible damage and more than 50% of people affected
4	Sum of parameters is 7	**Critical** - Accident level injury, damage irreversible or difficult to reverse, and more than 50% of people affected or between 2 and 50% of people affected
3	Sum of parameters is 6	**Moderate** - Incident to minor accident level injury (body harm and mental harm), reversibility moderate and between 2 and 50% of people affected
2	Sum of parameters is 5	**Negligible** - Verbal abuse (little damages), reversible damages, and between 2 and 50% of people affected or less than 2% of people affected
1	Sum of parameters is 3 & 4	**No damage or reversable** - The gravity of the human rights impact is negligible, the number of people affected is below 2% and impact is reversible

Table 3. Overview of benchmarks used to assess likelihood

Risk category	Benchmark used
Workers & Human Rights and Societal Welfare	Human Rights Scores – Our World In Data
Land Use and Biodiversity	Environmental Performance Index (EPI) Score
Company Governance	Basel Institute Index on Governance

The scores for severity and likelihood were then combined to form an overall risk rating for a specific risk issue, value chain stage and material. Each risk issue was then plotted onto a risk heat map in the RMO (see Figure 1). It is important to note that the more risk issues on the heat map does not necessarily mean more risk at this value chain stage or material, it does mean, however, that more public reporting on impacts was available.

The most salient risks are the ones whose severity and likelihood scores appear in the red squares of the risk heat map (see Figure 1 below), medium risks are the ones on the orange squares and lower priority risks are the ones in yellow.
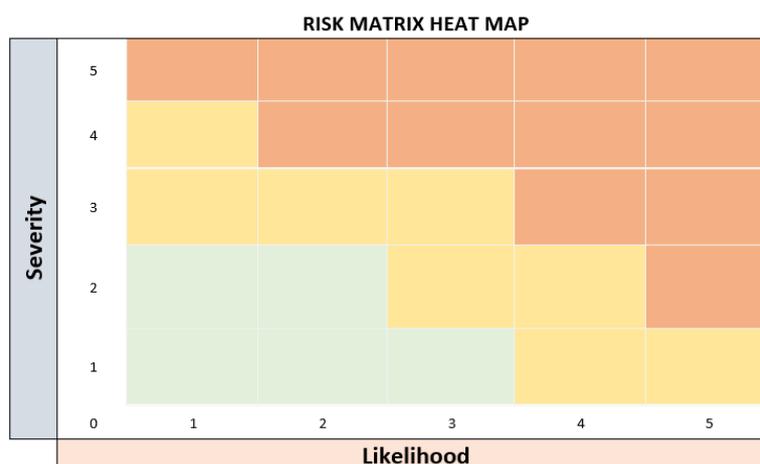

Figure 1. Representation of risk heatmap

In traditional risk prioritisation, a risk that is high severity, but low likelihood would have a similar priority to a risk that is low severity but high likelihood. However, in this case, a "high severity/low likelihood impact" would still take priority.