

## Risk models (examples of possible risks)

Categories	Risk examples
Business	<ul style="list-style-type: none"> <li>• Collapse of share in the materials market through entrance of competitors</li> <li>• Shortfall in meeting operating profit target due to rise in material prices and/or fluctuations in exchange rates</li> <li>• Poor spread and revenue declining due to slow recovery of the market</li> <li>• Sales decrease and decline in the market due to increase of imports, and increase of stock caused by falling sales</li> <li>• Significant deterioration in business due to reduced demand caused by changes in social climate</li> <li>• Influence on the business continuity by infectious diseases, etc.</li> </ul>
Sales	<ul style="list-style-type: none"> <li>• Violations of antitrust regulations</li> </ul>
Product safety	<ul style="list-style-type: none"> <li>• Inappropriate management of products to be exported</li> </ul>
Compliance	<ul style="list-style-type: none"> <li>• Contract-related problems and complaints</li> <li>• Non-compliance with intellectual property regulations</li> <li>• Violation of laws</li> <li>• Violation of tax laws regarding accounting procedures, or inadequate procedures</li> </ul>
Health and safety	<ul style="list-style-type: none"> <li>• Occurrence of serious accidents</li> <li>• Occurrence of serious occupational accidents</li> <li>• Non-compliance with laws related to the environment and occupational health and safety</li> <li>• Loss of social credibility through accidents or problems</li> </ul>
Quality	<ul style="list-style-type: none"> <li>• Inadequate management of high risk goods</li> <li>• Occurrence and increase in complaints</li> <li>• Occurrence of serious quality problems</li> <li>• Loss of social credibility through quality falsification</li> </ul>
Production and facilities	<ul style="list-style-type: none"> <li>• Production volume reduction due to problems in plants etc.</li> <li>• Production problems accompanying increase in operating efficiency</li> <li>• Occurrence of serious problems in using external facilities</li> </ul>
Capital	<ul style="list-style-type: none"> <li>• Occurrence of uncollectible debts</li> </ul>
Human resources	<ul style="list-style-type: none"> <li>• Increase in mental health problems</li> <li>• Occurrence and unsettled harassment issues</li> </ul>
Information management	<ul style="list-style-type: none"> <li>• Inadequate management of M&amp;A-related internal information</li> <li>• Leakage of confidential information and/or private information</li> <li>• Leakage of customer information</li> <li>• Unaddressed information system security risks</li> <li>• Leakage of insider information</li> </ul>

## Examples of ESG risks in the supply chain

### Environmental risks

Supply chain Issue	Risk example
Upstream-Downstream Environmental laws and regulations	<ul style="list-style-type: none"> <li>• Cessation of plants that are not compliant with environmental laws and regulations</li> <li>• Cessation of material procurement and loss of customers accompanied by tightening of environmental laws and regulations</li> <li>• Increase in subcontract expenses to comply with environmental laws and regulations</li> </ul>
Upstream-Downstream Climate change	<ul style="list-style-type: none"> <li>• Cessation of plant operation caused by natural disasters (heavy rain, flooding, powerful typhoons, etc.)</li> <li>• General price rise due to energy shift as an anti-climate change measure and cost increase due to tax reforms in the subcontractors' countries</li> </ul>
Upstream Destruction of nature	<ul style="list-style-type: none"> <li>• Severe criticism from NGOs etc. due to participation in deforestation for oil palm plantations through palm oil usage</li> <li>• Backlash from communities due to inadequate control over air, water, and soil pollution, as well as waste emissions (possibly including violation of laws), which may lead to inability to continue plant operations</li> </ul>
Upstream-Downstream Natural disasters	<ul style="list-style-type: none"> <li>• Cessation of plant operation caused by natural disasters (earthquakes, tsunamis, etc.)</li> </ul>
Upstream Material and energy procurement	<ul style="list-style-type: none"> <li>• Purchase of high-priced materials as a result of environmental procurement based on customers' policies</li> <li>• Inability to procure materials due to decrease in by-product materials through suppliers shift to green production</li> <li>• Cessation of plant operations due to outages of electricity, water, etc. through physical or political reasons</li> </ul>
Downstream Development of recycling	<ul style="list-style-type: none"> <li>• Market shrinkage due to rapid increase in product recycling</li> <li>• Pressure on profits through requests from customers to share recycling costs</li> <li>• Difficulty in continuing business due to disuse of additives unsuitable for recycling</li> </ul>

## Social risks

Supply chain Issue	Risk examples
Upstream-Downstream Human rights violations	<ul style="list-style-type: none"> <li>• Boycott of customers' products due to forced and/or child labor problems in subcontractors, followed by associated compensation</li> <li>• Boycott of products due to racial discrimination and/or human rights issues concerning workers in partner companies</li> <li>• Labor-management disputes and/or severe criticism from NGOs etc. due to unclear and/or discriminatory employment conditions for foreign workers</li> <li>• Severe criticism from NGOs etc. due to being regarded playing a role in local subcontractors' invasion of residential area for the indigenous population</li> <li>• Strikes or plant operation cessation following labor union formation and/or refusal of collective bargaining in local country</li> </ul>
Upstream-Downstream Poor working conditions	<ul style="list-style-type: none"> <li>• Health damage from worsened labor conditions in production sites etc.</li> <li>• Accidents or death from overworking of employees in subcontractors due to excessive long-hour working</li> <li>• Labor disputes and/or severe criticism from NGOs etc. due to failure to pay minimum wage or living wage</li> </ul>
Upstream Conflict minerals	<ul style="list-style-type: none"> <li>• Severe criticism from NGOs etc. for taking a part in inhuman acts through purchasing conflict minerals</li> </ul>
Upstream-Downstream Severe criticism	<ul style="list-style-type: none"> <li>• Severe criticism from NGOs etc. of a specific material or chemicals and plastics in general</li> <li>• Influence on business from tightening or changes to laws and regulations in response to rise in critical public opinion</li> <li>• Customers pulling out from business due to rise in critical public opinion and/or severe criticism</li> </ul>

## Governance risks

Supply chain Issue	Risk example
Upstream-Downstream Regional and geopolitical issues	<ul style="list-style-type: none"> <li>• Plant operation cessation due to territorial disputes or terrorism</li> <li>• Stagnation or uncertainty of Mexican economy due to lack of progress in NAFTA negotiations</li> <li>• Steep rise in raw oil prices or procurement difficulties due to worsened Middle East situation</li> <li>• Difficulty in business continuation through withdrawal of investment due to trading with sanctioned countries</li> </ul>
Upstream Bribery and corruption	<ul style="list-style-type: none"> <li>• Loss of social credibility through bribery of local civil servant by local consultant</li> </ul>

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