

ESG Materiality Map

Capital Goods

Oct. 6, 2022

Climate transition risks and sustainable products and services are the most material factors for both stakeholders and credit due to the sector's elevated energy needs. Waste and recycling, and human-capital related factors are examples of factors currently more pronounced for stakeholders than credit.

This report does not constitute a rating action



Sustainable Finance

Luisina Berberian
Madrid
Luisina.berberian
@spglobal.com

Credit Ratings

Donald Marleau
Toronto
donald.marleau
@spglobal.com

Contributors

Lai Ly
Paris
lai.ly
@spglobal.com

Pierre Georges
Paris
pierre.georges
@spglobal.com

ESG Materiality Map

Capital Goods

In line with the research report “[Materiality Mapping: Providing Insights Into The Relative Materiality Of ESG Factors](#),” published on May 18, 2022, S&P Global Ratings is publishing research on the ESG materiality map for the capital goods sector. We provide an illustration of our current view of the relative materiality of certain environmental and social (E&S) factors, from both the stakeholder and credit perspectives, for the sector. The materiality map does not represent any new analytical approach to the treatment of E&S factors in our credit ratings. See our ESG criteria for more information on how we incorporate the impact of ESG credit factors into our credit ratings analysis.

Capital Goods Sector

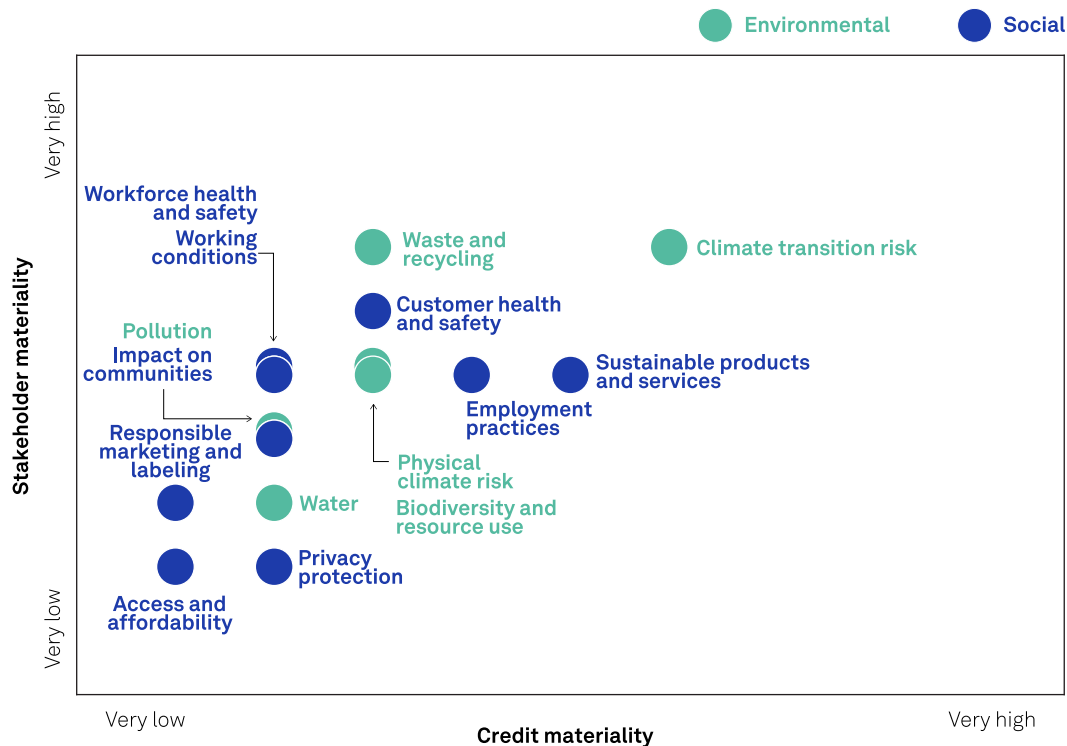
The capital goods sector covers a wide variety of manufacturers, including makers and distributors of heavy equipment, industrial goods, electrical equipment, components, and their related services. This sector excludes aerospace equipment suppliers.

Key Takeaways

- Climate transition risks and sustainable products and services are the most material factors for stakeholders and credit. This is because capital goods has elevated energy needs and ongoing regulatory and public pressure to transition to lower-carbon inputs and products with smaller lifecycle impacts on health and the environment.
- Waste and recycling is slightly more material for stakeholders than credit. Disposing products reaching the end of life is generally more material than manufacturing waste and recycling. We expect this to become more pronounced for credit due to stricter product lifecycle and waste management standards.
- Workforce health and safety and employment practices are material for stakeholders because of the importance of attracting and retaining a qualified workforce. Skilled labor shortages constrain production capacity or increase costs. These factors to date, have been less material for credit because financial impacts have so far been embedded in business strategies.

See materiality map on the following page.

ESG Materiality Map For The Capital Goods Sector



The materiality map provides an illustration at a point in time, of our findings on the relative materiality of certain environmental and social (E&S) factors, from both the stakeholder and credit perspectives, for the sector. It does not represent any new analytical approach to the treatment of E&S factors in our credit ratings. See our ESG Criteria for more information on how we incorporate the impact of ESG credit factors into our credit ratings analysis. Source: S&P Global Ratings.

How To Read The ESG Materiality Map

The stakeholder materiality (Y axis) reflects our assessment of the relative level of impacts and dependencies of the sector on the environment, society, and economy.

The credit materiality (X axis) reflects our assessment of the relative level of potential and actual credit impact for the sector. The credit implications for the factors positioned on the left side to the middle of the X-axis would be more limited and absorbable. On the right side, there is higher potential for these implications to be more disruptive. We assess credit implications for an entity based on its individual characteristics.

To assess the materiality of E&S' factors we consider both the likelihood of the impact from a given factor, as well as the magnitude of the impact. The materiality of the factors varies depending on the perspective (stakeholder or credit) as well as the evolving and dynamic interactions between these two dimensions.

The main areas of the map:

- The upper-right quadrant displays the most material, on a relative basis, E&S factors identified for the sector from both a stakeholder and credit perspective.
- The upper-left quadrant presents factors that are more material from a stakeholder than credit perspective. These factors have the potential to become more material from a credit perspective.
- The bottom-left quadrant shows factors that are less material for both stakeholders and credit. Their materiality may evolve over time and this dynamic may not be linear.

Examples Of Material Factors

Below we provide the rationale of some of the material factors to illustrate the above findings.

Climate transition risk

Climate transition is one of the most material factors for the capital goods sector from both the stakeholder and credit perspectives. The sector is exposed to climate transition risks through its entire value chain. Equipment manufacturers consume an array of metals and plastics, whose extraction and production can generate significant GHGs. In addition, manufacturing these products is often energy-intensive, and the products themselves often consume significant power, fuels, and lubricants over their lifespan. Moreover, end markets a company serves can influence revenue and exposure to climate-related risks and opportunities. For example, a company serving primarily the oil and gas sector faces potential GHG-related market disruption while a company manufacturing equipment for the renewable sector may benefit from tailwinds. Further, the sector's suppliers like metals and plastics producers face other environmental and climate-related pressures, which could alter their products or increase costs, much of which may be passed through to manufacturers and their customers. The sector's sometimes large environmental footprint invites significant regulatory scrutiny either generally or for specific products potentially leading to additional costs and capital investment to switch fuel mix or manufacturing technologies.

Sustainable products and services

Customers and local communities globally are driving the growing demand for sustainable products across the sector, either because of regulation or increasing public awareness. Companies across all sectors are working to decarbonize their own supply chains, and we anticipate buyer awareness, regulation, and demand for more recyclable capital goods with lower environmental footprints (such as for heavy machinery) will increase. In turn, we believe this will lead to better measurement and control of energy use, emissions, or effluents. Examples of more sustainable products include those designed to be more energy efficient when in use and to generate less waste because of fewer parts used in the machine. Products also include those that improve a company's environmental footprint like smart meter manufacturers. From a credit perspective, manufacturers are accelerating their pursuit of more sustainable products to meet their own, and their customers' sustainability goals. As such, we expect persistent investment in developing new products and improving processes aimed at better controlling and monitoring climate transition risks, and regulation-driven durable, upgradeable, or recyclable products. As this demand grows and associated investment increases, credit materiality may increase.

Employment practices

Employment practices is a material factor from both a stakeholder and credit perspective. Most notably, the sector is relying more on innovation, especially amid technological and digital transformation. As such, companies rely on skilled workers and must maintain their ability to attract, retain, and develop talent because competition from other industries could limit worker availability. In many countries, shifts in demographics and labor markets in the wake of the pandemic have had a direct impact on production capacities and costs. Higher absenteeism and turnover and difficulties recruiting new workers in some instances constrained output and required increased investment in training and development as well as supervision and quality control. Finally, capital goods companies are often large local employers with a significant union

presence, making labor relations important from both a stakeholder and financial impact standpoint.

Waste and recycling

The waste and recycling issues are one of the most material factors for the sector from the stakeholder perspective, with less materiality for credit. Direct manufacturing operations can generate hazardous waste, such as metals, wastewater, or compounds used in electrical and electronic equipment operations, that are regulated to a widely varying degree around the world. Even more material for both stakeholder and credit, however, is the waste associated with the disposal of products at the end of their life. Customers increasingly expect manufacturers to participate in end-of-life waste and recycling programs, which could result in increased regulation in some regions. Some markets such as steel, aluminum, and other metals have established recycling chains, where recovered materials have economic value. However, many components are currently difficult to recover, reuse, or recycle, particularly electronics, some plastics, and hazardous materials. To manage potential scarcity of raw materials, we expect circular product lifecycle management will become more strictly regulated. This will likely compel issuers to increase their investment to preserve competitive positions and protect against changes in law.

Physical climate risk

Physical climate risk is currently more material for stakeholders than for credit. Extreme weather events--including but not limited to storms and heat waves--can disrupt transportation routes that deliver goods and therefore, supply chains in the capital goods sector. Manufacturing and assembling facilities in climate-sensitive regions--including coastal areas--are typically more exposed. These events, which are generally becoming more frequent and severe (although varying with geography) may directly affect large communities (notably by impeding the ability to work) and a broad base of customers when causing delays to deliveries. Manufacturing, testing, and operational facilities may be more challenging to relocate. From a credit perspective, companies are directly exposed to disruption and delays, but supply chains and production capacity are often diffuse enough to mitigate acute event risks. The manufacturing sector is inherently nimble, so that it will usually locate assets with the most favorable blend of access to inputs, demand, and increasingly sustainability. Nevertheless, building resilience of assets to more frequent acute physical risks--through asset hardening or strengthening, as well as other measures--could affect investments and operating costs.

Workforce health and safety

Workforce health and safety is one of the most material social factors from a stakeholder perspective, more so than for credit. Manufacturing activities are exposed to occupational health and safety risks for employees and contractors operating large equipment. Workers can be exposed to high heat, noise, dust, and heavy machinery. Incidents are infrequent, but they can have severe impacts, resulting in workplace injuries and fatalities, which can also affect companies' operations, legal exposure, and reputation. For credit, the sector, particularly in heavier manufacturing, is more sensitive to concerns around managing workers' safety. The financial effects, however, should remain moderate, considering existing policies and standards, so that unexpected additional costs related to health and safety are often not substantial.

Working conditions

Working conditions generally have more pronounced stakeholder materiality than credit for capital goods. From a stakeholder standpoint, the sector's supply chain intensive nature exposes it to human and labor rights issues that can be relatively severe across the supply chain. Working conditions like human or worker rights are currently only a moderate consideration for credit quality. The costs and practices associated with maintaining adequate working conditions vary by jurisdiction, but even small manufacturers or makers of lower-margin products can source fabricated inputs from myriad providers around the world. Profitability in manufacturing relies heavily on worker productivity and cost competitiveness, but the industry's diffuse sources of supply mute the financial risks.

What is our approach to research on the ESG materiality map?

Referring to the research report "[Materiality Mapping: Providing Insights Into The Relative Materiality Of ESG Factors](#)," published on May 18, 2022, this research is built on the ESG materiality concept that considers ESG issues as material when they could affect stakeholders, potentially leading to material direct or indirect credit impact on entities. It considers that all businesses, through their activities and interactions, impact and depend, directly or indirectly, on stakeholders such as the environment (natural capital), society (human and social capital), and economy (financial capital). Using this ESG materiality concept, S&P Global Ratings has worked toward identifying a common, global, cross-sector set of E&S factors that we believe are material to stakeholders, and either are already, or have the potential to become, credit material for entities. The materiality map we propose provides an illustration at a point in time, of our findings on the relative materiality of those factors, from both the stakeholder and credit perspectives.

How does the sector ESG materiality map relate to credit ratings or ESG evaluations?

The sector materiality map is a visual representation of the factors that we consider impactful to the sector from a stakeholder and credit perspective for the purposes of this research. It does not represent any new analytical approach to the E&S factors in our credit ratings.

The relative materiality of the factors indicated on the materiality maps may inform the E&S Risk Atlas scores and the weights of the E&S factors used in ESG evaluations.

They may also inform our discussions with issuers on those factors' existing or potential credit materiality.

Related Research

- [Materiality Mapping: Providing Insights Into The Relative Materiality Of ESG Factors](#), May 18, 2022
- [Environmental, Social, And Governance Principles In Credit Ratings](#), Oct. 10, 2021
- [ESG Evaluation Analytical Approach](#), Dec. 15, 2020

Copyright © 2024 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses, and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw, or suspend such acknowledgement at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal, or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain nonpublic information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, www.spglobal.com/ratings (free of charge) and www.ratingsdirect.com (subscription) and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at www.spglobal.com/ratings/usratingsfees.

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.