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Ratings

ESG Credit Brief

Telecommunications

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This report does not constitute a rating action

Key Takeaways: Telecommunications

Social factors, such as access and affordability of telecom services and privacy protection are the most material factors for the telecommunications sector

- This is because of the sector's key role in providing modern telecom services that are essential to the global economy and society; meanwhile, data privacy and security are becoming increasingly relevant for the creditworthiness of all stakeholders.
- These factors could lead to increased investment in telecom infrastructure, upgrades, and maintenance in some regions, and to some authorities promoting greater competition through wholesale unbundling and restricting market consolidation.
- Sustained high investment and competition may dampen earnings growth and returns on capital, despite the continued increase in demand for data and telecom services.

Physical and climate transition risks are among the most material environmental factors

- The telecom sector has a large physical asset footprint that is exposed to extreme weather events.
- The sector's energy needs have become increasingly important given rapid growth of cloud and AI technologies, which are fueling demand for data centers and the amount of energy to run them.

Material ESG Factors: Telecommunications

Overview | ESG Materiality Map

ESG factor	Social risks: Network reliability and access	Social risks: Cybersecurity	Climate transition risks
Key risks/opportunities	The systemic importance of telecom services to society and the economy.	Exposure to reputational harm, regulatory risks, and operational disruption if data breaches happen.	Assets' exposure to extreme weather; switch to greener fiber tech but with rising demand for energy and water-intensive data centers.
Credit materiality	High, with potentially increasing competition and required investment.	Medium, potentially leading to higher customer attrition rates, as well as incident and remediation costs.	Medium. Risks include outages and repair costs, high investment in digital infrastructure and securing sustainable resources.
Potential financial impact	Weaker profits, cash flows, and credit metrics.	Lower sales and higher costs could dampen profitability and credit metrics.	Weaker credit ratios from weather-related impacts on profits and losses, and higher capex impact on cash flow.
Rating impact	Embedded in our current view of the sector, potentially negative if social risks increase.	None so far, since financial impacts have been short term and not sufficiently material to date.	Limited so far but can be a key competitive edge for first movers in fiber and data center technology.

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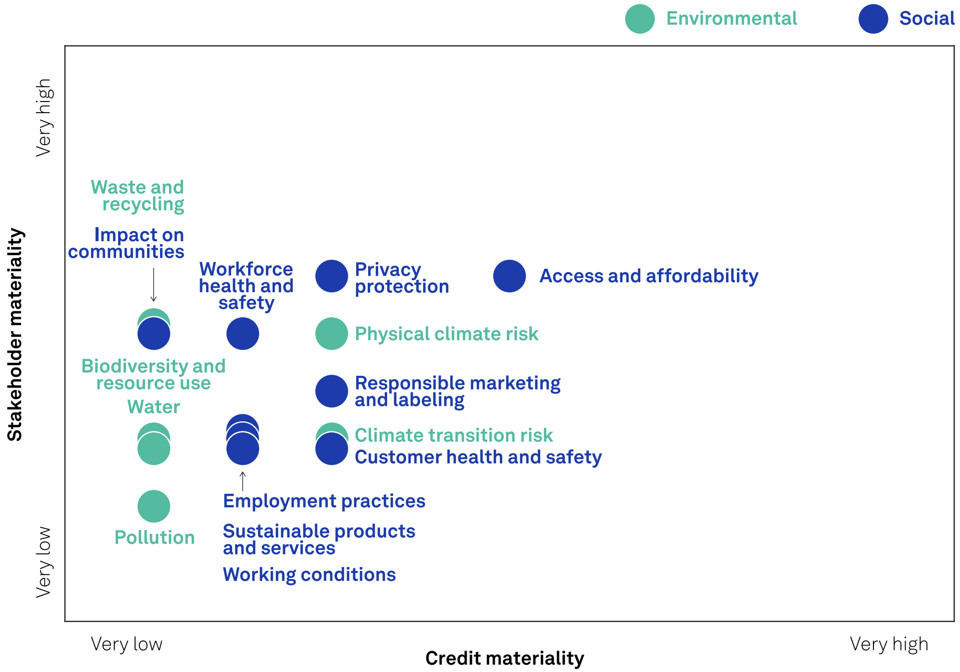
Material ESG Factors: Telecommunications

Overview | **ESG Materiality Map**



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.

Access and affordability are material to credit quality, and privacy protection is becoming more relevant.

- Regulatory and public pressure is increasing, particularly in markets with low uptake of next generation telecom.
- This could lead to increasing investment and competition.

The sector will play a critical role in the transition to a low-carbon future.

- The ongoing transition to FTTH (fiber to the home), which is about 85% more energy efficient than copper networks, will help achieve energy-reduction targets.
- Yet rising demand for data due to new technologies means rising energy use, which could offset energy efficiency gains, especially for data centers.
- Telecoms with high physical asset concentrations are materially exposed to extreme weather events.

Topics We May Discuss When Relevant

Governance related to social risks

Exposure to physical climate risks and climate transition risk

- The strategy to increase network reliability and increase affordability for low-income communities
- Key risks and opportunities the company envisages for the business given greater stakeholder focus on social risks
- What key initiatives are in place to protect data and respond to cyberattacks
- The frequency at which cyberattacks occur
- The strategy/plan for responding to cyberattacks and whether there is an established process or framework to mitigate or minimize the risk of cyberattacks

Topics We May Discuss When Relevant

Governance related to social risks	
Exposure to physical climate risks and climate transition risks	• How the board addresses climate transition risk • What the company's decarbonization goals are, if any • What the company sees as the greatest hurdles in achieving its emission reduction goals • The type of power systems (off or on grid) used in the power network. If off grid, the types of energy sources used (such as diesel, solar, wind, or biogas) • How the company has adapted to the challenge of increasing demand for data centers in meeting emissions reduction goals • Particularly for government-related entities, whether subsidies or carbon benefits are available for building data centers and cloud storage, and how this strategy aligns with carbon-reduction efforts • Concentrations in the asset base, potential risks related to extreme weather events due to this asset concentration, and plans to mitigate such risks • Whether there are incentives for employees to contribute to achieving sustainability targets, for example embedded in the compensation framework • Focus on insurance coverage, costs, and insured risks

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Credit Materiality Is Increasing Gradually

Business risk/financial risk

Access and affordability of telecom services, privacy protection, climate transition, and physical climate risks are the most material factors. We factor this risk into our ratings on companies in the telecommunications sector when we assess their business risk and financial risk profiles.

Key business risk profile factors

- The regulatory framework, its supportiveness, predictability, and compensation measures to support cash flow that allows for the required network reliability and affordability for low-income communities
- Carbon emissions volumes and intensity relative to the sector average
- Commitment to cutting emissions, how far advanced it is, and track record of emissions reductions
- Technologies adopted to reduce emissions, associated capital investments, and impact on the balance sheet
- Strategy to balance capturing growth from rising demand in data centers and achieving carbon emissions targets
- Assets' concentration and location and potential risks related to extreme weather events
- Process or framework to protect data and limit the impact of cyber attacks on the competitive advantage and operating efficiencies.

Key financial risk profile factors

- Capital spending linked to carbon reduction initiatives and greener production processes
- Incident and remediation costs related to cyber attacks, alongside impacts on the customer base and pricing power
- Ongoing litigation related to both social and environmental factors, and potential associated remediation costs

Rating implications: Limited so far

Rating actions

Social risks, physical climate risks, and climate transition risks have so far had limited influence on our ratings on companies in the telecom sector

- Public pressure and competition to provide affordable access to state-of-the-art connectivity will continue to drive investment and price competition and dampen prospects for higher ratings.
- Data breaches have carried more headline risk than tangible credit impact, and we expect the sector's awareness and defenses will remain higher than the corporate average. Nonetheless, we note that our sector coverage does not include entities in certain jurisdictions that have experienced a rise in cyber attacks.
- The transition to renewable energy sources such as solar, wind, biodiesel, and fuel cells may play a role in credit quality in future. For instance, companies are signing long-term agreements to purchase solar power; data center providers are already using green energy sources via long-term power purchase agreements, supplier-based green power, and renewable energy credits.
- The credit materiality of extreme weather events has been limited to companies with high asset concentration.
- Waste and recycling are material for stakeholders, due to waste generation in upstream supply chains and at the end of life of equipment, though this has not yet materially affected creditworthiness.

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Related Research

- The AI Gold Rush Will Use Telecom's Picks And Shovels, July 30, 2024
- Industry Credit Outlook Update North America: Telecommunications, July 18, 2024
- Industry Credit Outlook Update Europe: Telecommunications, July 18, 2024
- ESG In Credit Ratings Deep Dive: ESG Factors Drove 13% Of Corporate And Infrastructure Rating Actions Since 2020, March 13, 2024
- ESG Materiality Map Telecommunications, Oct. 19, 2022
- How U.S. Data Centers Are Navigating Inflation And Recession Risks, July 21, 2022
- Environmental, Social, And Governance Principles In Credit Ratings, Oct. 10, 2021

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