

# Telecom

## ESG Evaluation Key Sustainability Factors

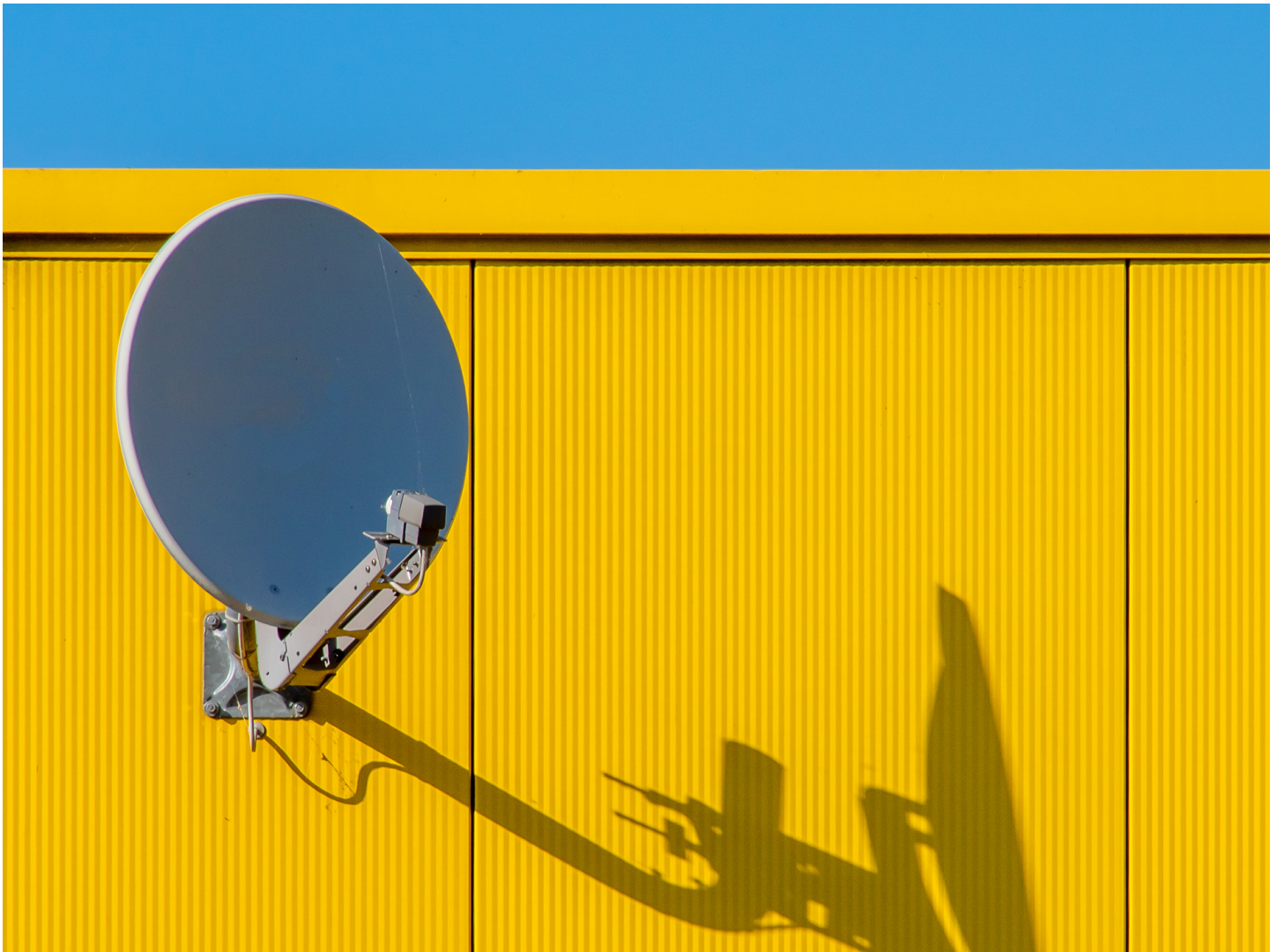
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## Approach

Our key sustainability factors identify the most material environmental and social risks assessed in our ESG Evaluation. We assess the materiality<sup>1</sup> of those risks across the industry's value chain and reflect them in the weighting of our environmental and social factors. We also provide the quantitative indicators<sup>2</sup> used to assess a company's performance relative to its industry peers on each of those factors. For further information, please refer to our ["Environmental, Social, And Governance Evaluation: Analytical Approach."](#)

## Scope





The telecom sector comprises companies that provide fixed and wireless communications services, including internet, cable, and telephone, and operate extensive cable, fiber optic, and data center networks. Wireless communications occur primarily through radio-based signals routed through cellular towers. Fixed line services include telephone, cable television, and internet.

## Material Environmental Risks

- **Transition to low-carbon energy sources:** The rapid increase in data traffic across telecom networks raises electricity use at data centers and in network infrastructure, a trend that will likely continue. Indirect (scope 2 and 3) greenhouse gas emissions associated with electricity generation will likely face increasingly stringent regulation globally, which could increase input costs over the medium to long term.
- **Waste management and product end-of-life:** Waste associated with end-of-life network equipment and hardware waste, including cables, servers, towers, and mobile handsets, can pollute land and water resources. Increasing waste volumes may increase regulatory and reputational risk if improperly managed. Finally, product take-back and extended producer responsibility legislation could increase compliance costs.
- **Physical climate change impacts:** Extreme weather events, including storms or floods, have caused damage to above-ground equipment, resulting in network interruption or increased maintenance and replacement costs.

## Environmental Factors: Weighting And KPIs

The higher weight on GHG emissions primarily reflects increasing data consumption and associated energy use. We apply a lower weight on waste and pollution to reflect exposure to regulatory risk that could become more impactful in the medium term. The two remaining factors as less significant across the sector's value chain. In our ESG Evaluation, we use qualitative and quantitative indicators to inform our opinion on an entity's management of its environmental impacts relative to industry peers. Examples of qualitative indicators include an entity's policies and commitments to managing long-term physical climate impacts on network infrastructure. The main quantitative performance indicators relevant to the telecom sector are listed in the table below.

Factor	Weight	Key performance indicators	Other performance indicators
 <b>Greenhouse gas emissions</b>	50%	<ul style="list-style-type: none"> <li>- Scope 1 and 2 emissions intensity (tons CO<sub>2</sub>-e, by revenues, energy consumption [mWh] and network traffic [petabytes])</li> <li>- Energy intensity (by revenue and network traffic)</li> </ul>	<ul style="list-style-type: none"> <li>- Power usage effectiveness of data center operations (total facility energy/IT equipment energy)</li> <li>- Scope 3 emissions intensity (tons CO<sub>2</sub>-e, by revenues and by network traffic)</li> <li>- % of energy sourced from renewable sources</li> </ul>
 <b>Waste and pollution</b>	30%	<ul style="list-style-type: none"> <li>- Total waste (tons)</li> <li>- % of waste that is recycled</li> </ul>	<ul style="list-style-type: none"> <li>- % of waste that is hazardous</li> </ul>
 <b>Water</b>	10%	<ul style="list-style-type: none"> <li>- Water use intensity (m<sup>3</sup>, by revenues and by network traffic)</li> <li>- % of operations exposed to high or extremely high water stress</li> </ul>	<ul style="list-style-type: none"> <li>- Total water consumption (m<sup>3</sup>)</li> </ul>
 	10%	<ul style="list-style-type: none"> <li>- % of facilities and land area assessed for biodiversity risks</li> </ul>	<ul style="list-style-type: none"> <li>- % of operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas</li> </ul>

## Land use and biodiversity

## Material Social Risks





Telecom companies are exposed to material social risks within their value chains:

- **Cybersecurity:** The sector is responsible for transmitting most electronic communications and data traffic globally, and data volumes are expected to continue increasing. Companies are consequently exposed to significant reputational harm, regulatory risk, and operational disruption if data security breaches, loss of customer data, and network disruptions occur.
- **Network reliability and access:** The systemic importance of telecom services to society and the economy underscores the importance of resilient and accessible network to the widest number of users. Ensuring access to affordable services, including for low-income and underserved communities, is also relevant for companies' reputation and management of regulatory risk.

## Social Factors: Weighting And KPIs

The higher weight on customer engagement is driven by the significance of cyberrisks and the importance of network reliability and access to financial and operating performance in the industry. Our weighting on safety management and communities considers community-related factors such as potential health impacts of radio frequency waves, and the importance of digital inclusion and access. We apply a similar weighting to the workforce and diversity factor to reflect the relative significance of human capital for value creation and innovation in the industry.

In our ESG Evaluation, we use qualitative and quantitative indicators to inform our opinion on an entity's management of its social impacts relative to industry peers. Examples of qualitative indicators include the quality and effectiveness of an entity's policies on ensuring network reliability and access for customers. The main quantitative performance indicators are listed in the table below.

Factor	Weight	Key Performance Indicators	Other performance indicators
 <b>Customer engagement</b>	40%	<ul style="list-style-type: none"> <li>– Network interruption frequency (events/customers) and duration (hours/customer)</li> <li>– Number of data breaches</li> </ul>	<ul style="list-style-type: none"> <li>– % satisfied customers (third-party customer satisfaction index)</li> <li>– Customer complaints on data breaches</li> </ul>
 <b>Workforce and diversity</b>	20%	<ul style="list-style-type: none"> <li>– Voluntary/involuntary turnover rate (%)</li> <li>– % of women and minorities in total workforce, junior and senior management positions, and in revenue-generating functions</li> </ul>	<ul style="list-style-type: none"> <li>– Employee engagement %</li> <li>– Gender pay gap</li> <li>– Average hours spent per FTE on training and development</li> </ul>
 <b>Safety management</b>	20%	<ul style="list-style-type: none"> <li>– Lost time injury frequency rate for employees and contractors</li> <li>– Total recordable injury frequency rate for employees and contractors</li> </ul>	<ul style="list-style-type: none"> <li>– Number of fatalities</li> <li>– Occupational injury frequency rate for employees and contractors</li> </ul>
 <b>Communities</b>	20%	<ul style="list-style-type: none"> <li>– Spend on engagement with local communities as a % of philanthropic spending</li> <li>– Cash contributions, employee volunteering, and in-kind giving converted into reporting currency</li> </ul>	<ul style="list-style-type: none"> <li>– % of operations with local community engagement, impact assessments, and development programs</li> </ul>

## Submit Feedback

You can submit your feedback [online](#), by [email](#), or [telephone](#).

Please specify which sector you are commenting on when submitting feedback.

We would particularly like to hear from you regarding:

1. Which risks are missing or not relevant?
2. Which KPIs are missing, could be enhanced, or are not relevant?
3. What views do you have on the suggested factor weights for the environmental and social analysis?
4. Do you have additional feedback(s) on this document?

### Endnotes

<sup>1</sup> Events and issues are material for the ESG Evaluation when in our view they could meaningfully affect the entity's business operations, cash flows, legal or regulatory liabilities, access to capital, reputation, or relationships with key stakeholders and society more generally, either directly or through its value chain (upstream or downstream).

<sup>2</sup> We are mindful that some may be produced using different methodologies and scopes.

## Related Research

- [The ESG Risk Atlas: Sector And Regional Rationales And Scores](#), July 22, 2020
- [Our Updated ESG Risk Atlas And Key Sustainability Factors: A Companion Guide](#), July 22, 2020
- [Environmental, Social, And Governance Evaluation: Analytical Approach](#), June 17, 2020
- [How We Apply Our ESG Evaluation Analytical Approach: Part 2](#), June 17, 2020
- [ESG Evaluation: Másmóvil Ibercom S.A.](#), July 11, 2019

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