

# ESG Materiality Map

## Airlines

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Climate transition risk and customer health and safety are the most material environmental and social factors from both stakeholder and credit perspectives. Employment practices, pollution, or privacy protection are examples of factors currently more material for stakeholders than credit.

*This report does not constitute a rating action*



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## Airlines

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 airlines 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.

### Airlines Sector

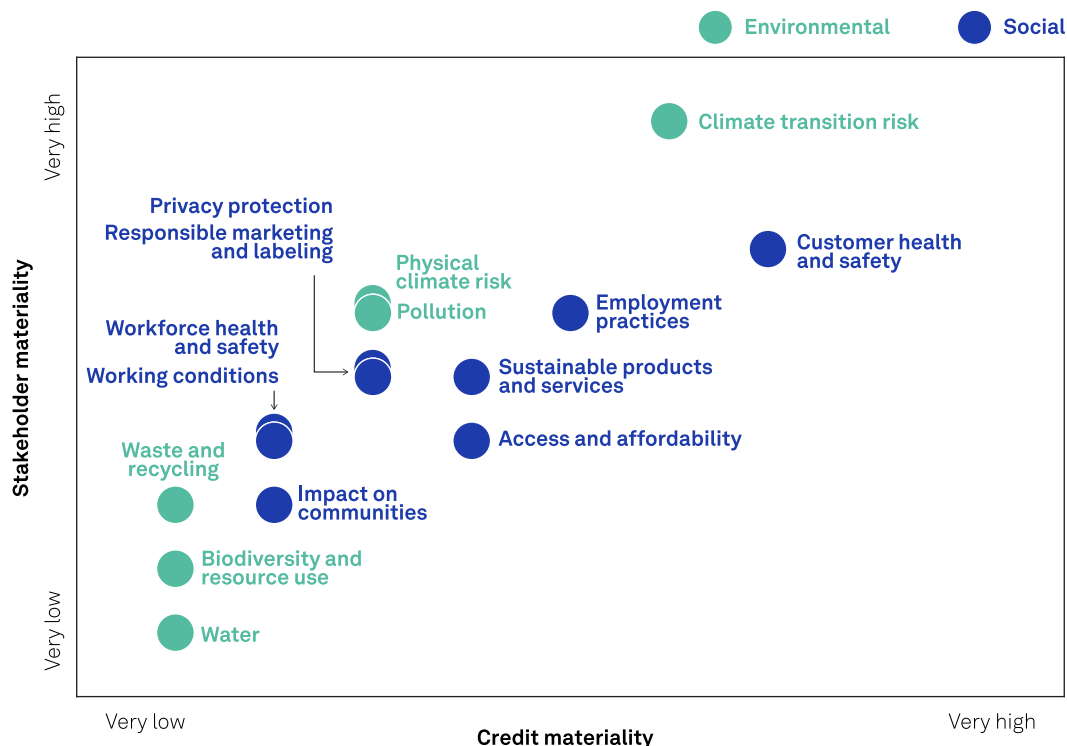
Airlines provide primarily air transportation to passengers for leisure and business purposes, and ancillary freight services. The sector also includes aircraft leasing companies, which are indirectly exposed to environmental and social factors through their airline clients.

#### Key Takeaways

- Climate transition is more of a material consideration for stakeholders than credit because of airlines’ considerable carbon intensity and corresponding public and regulatory pressure. Potential credit impact relates to the need to continue investing in new planes and future taxes or regulations, which could increase costs and air fares, with spillover effects on access and affordability.
- Customer health and safety considerations weigh more heavily on credit than stakeholders. Disease outbreaks, such as COVID-19, have severely affected airline operations and finances, while also limiting customers’ mobility. Accidents are very rare but can severely affect passengers, crews, and their relatives. They may lead to litigation, reputational damage, and reduced load factors, affecting airlines’ earnings.
- Employment practices are additional important considerations for stakeholders, and usually have limited credit impact. Difficult conditions during the COVID-19 pandemic and rapid ramp up of flights when demand returned in some markets exacerbated these challenges. Labor relations are important factors in airlines’ cost structure as strikes, while usually brief, can cause significant financial damage.

See materiality map on the following page.

## ESG Materiality Map For The Airlines 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.

Assessing E&S factors' materiality: 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 a highly material issue for both stakeholders and credit. Currently, air transport accounts for 2%-3% of global GHG emissions according to the IEA, but the proportion is gradually increasing. While there are alternative transportation modes with lower carbon intensity over short distances (for example, railroads), substitution risk remains low, with the bulk of airline traffic being long distance. Reducing emissions is difficult and expensive. Airlines face increasing pressure to use more sustainable jet fuel (which is currently available in limited quantities and several times more expensive than kerosene) and the risk of higher taxes or costs through emission trading schemes. The immediate credit impact will be the need to continue investing in more fuel-efficient planes, accelerating the normal trend toward upgrading with more technologically advanced aircraft. More radical changes in propulsion, such as hydrogen (which would require more far-reaching redesign of planes and ground infrastructure) and electric batteries (which appear to be feasible only for small, short-range planes) are unlikely over the next decade, in our view.

### Customer health and safety

Customer health and safety issues are highly material for both airlines' stakeholders and credit. Globally, the industry scheduled more than 38 million flights and carried 4.5 billion passengers in 2019 (source: International Civil Aviation Organization). Accidents have the most direct and intense impact on stakeholders as they often result in severe casualties. Accidents, while rare, are highly visible events and can influence perceptions of safety of an airline or the industry overall (though these effects tend to be temporary), undermining public trust. As such, they may damage reputation, and reduce demand and load factors, potentially increasing legal and regulatory exposure. Further, accidents or engineering issues, and the actions required to remediate, may incur substantial direct costs that may impair credit. The disruptive effects of disease outbreaks, which become more frequent in an increasingly interconnected world, on airlines can be severe both for stakeholders and credit. Prompt actions to contain the spread of viruses (for instance COVID-19) can dramatically reduce passenger traffic, sometimes with lasting effects, resulting in heavy losses, rising debt, and rapid deterioration of creditworthiness. A failure to act in a timely and proportionate manner may put customer health and safety at risk and damage reputation, in addition to harming airlines' credit.

### Employment practices

To date, issues related to employment practices have been somewhat more material for stakeholders than for credit. Recruitment, retention, and training of workforce are important issues for airlines and key to maintaining or growing competitive position – particularly during periods of staff shortages. Main stakeholder-related considerations may stem from career opportunities (especially for flying crews), employee diversity (low share of female pilots, for example), fatigue (due to noise, irregular schedules, jet lag, and exposure to passengers' stress), and employment uncertainty due to industry cyclicality. These could result in lower service quality, high turnover, and potentially safety, affecting customers. From a credit perspective, labor relations management is important, as operational disruptions due to strikes or other workforce actions can significantly affect users and cause material financial damage.

## Access and affordability

In recent decades, air travel has become increasingly affordable and thus, a viable and popular mode of transportation for the public. As such, access and affordability is a factor of growing materiality for both stakeholders and credit. The energy transition requires considerable investments in airplanes. This will likely increase the sector's capital intensity and fuel costs, requiring higher fares, affecting less affluent stakeholders and potentially reducing load factors as a result, or challenging the low-cost carrier business model's viability. While not so material today, these may have growing consequences for stakeholders and credit.

## Pollution

Pollution for airlines is more material for stakeholders than credit. Aircraft emit air pollutants, such as nitrogen oxides and particles. Beyond the impact on air quality, especially around airports, airlines also cause noise pollution, which affects stakeholders living near airports and within busy flightpaths. As almost all airports are near or in major cities, this affects the quality of life for many people globally. Some countries have regulated aircraft noise for several decades and tighter standards have significantly reduced noise. The credit effect of these regulations will remain manageable, as each successive technological engine noise improvement was accompanied by greater fuel efficiency, which airlines were willing to pay for on economic grounds.

## Privacy protection

Privacy protection has thus far been more material for stakeholders than credit. The sector increasingly collects and stores customers' data. This is because most, if not all, airlines have customer loyalty programs, which include perks such as discount on future voyages or travel conditions upgrades for frequent users. They need extensive data collection to personalize offers. In addition, passenger carriers rely on extensive information technology systems to manage their operations and collect revenue. Data privacy and cyber risk are hence relevant themes. Data leakages may result in unsolicited offers to customers or have further reaching consequences if stolen personal data is more sensitive (such as banking details or specific travel requirements due to personal conditions). Airlines are typically subject to the General Data Protection Regulation (GDPR) and other applicable data protection laws. However, data breaches have not yet translated into hefty financial penalties.

## 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

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