S&P Global Ratings

Environmental, Social, And Governance Evaluation Analytical Approach

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Executive Summary

S&P Global Ratings' environmental, social, and governance (ESG) Evaluation is a cross-sector, relative analysis of an entity's capacity to operate successfully in the future and is grounded in how ESG factors could affect stakeholders, potentially leading to a material direct or indirect financial impact on the entity. ESG factors typically incorporate the entity's impact on the natural and social environment and the quality of its governance. Our definition of stakeholders for a particular entity goes beyond shareholders to include employees, the local community, government, regulators, customers, lenders, borrowers, policyholders, voters, members, and suppliers, among others.

First, we establish an ESG Profile for a given entity, which assesses the exposure of an entity's operations to observable ESG risks and opportunities, accounting for the governance structure in mitigating risks and capitalizing on opportunities. The ESG Profile analysis starts with a global assessment of ESG-related exposure by sector and location, which we call the ESG Risk Atlas. We have both a sector and regional atlas.

Second, we assess the entity's long-term Preparedness, namely its capacity to anticipate and adapt to a variety of long-term plausible disruptions. These disruptions are not limited to environmental and social scenarios, but could also include technological or regulatory changes where relevant, among other factors. This is because, in our opinion, high-quality corporate governance includes the full spectrum of current and potential risks and opportunities an entity faces beyond typical financial planning horizons.

The ESG Evaluation is not a credit rating, a measure of credit risk, or a component of our credit rating methodology. However, the information we gather for an ESG Evaluation can inform our credit analysis of rated entities.

Chart 1

ESG Evaluation

1. Our final ESG Evaluation ranking will combine an entity's ESG Profile with our long-term Preparedness opinion (see chart 1), thereby indicating an opinion on an entity's relative exposure to observable ESG-related risks and opportunities, and our qualitative opinion of the entity's long-term sustainability and readiness for future opportunities and disruptions. We will monitor the ESG Evaluation score to account for new data points, updated strategies, and events that affect the entity, subject to materiality.

Approach To Ranking

2. The ESG Evaluation is a ranking on a 100-point scale. A higher ranking expresses our view that the entity is more likely to be sustainable, based on active management of ESG-related risks and opportunities, relatively strong governance, and the entity's ability to adapt to change and take advantage of long-term disruptive opportunities. Similarly, we typically associate lower scores with greater exposure to ESG-related risks, comparatively weaker governance, and not being as well equipped to handle or exploit potential long-term business disruptions and opportunities.

3. Within the ESG Profile, we assess the contribution of the individual environmental, social, and governance profiles and explain our opinions and analysis of each factor in our ESG Evaluation Report.

4. The Preparedness opinion is described as one of the following; Best In Class, Strong, Adequate, Emerging, or Low. The combination of the ESG Profile and Preparedness reflects the relativity of the two assessments at different points in their scales. The principles we use to combine the ESG Profile score with our Preparedness opinion are:

   – The highest ESG Evaluations generally require Best-In-Class or Strong Preparedness.
   – The lowest ESG Profile scores are unlikely to be materially offset by favorable Preparedness.
   – Best-In-Class Preparedness is rare and will generally have a significantly positive effect in the evaluation.
   – Low Preparedness is rare and will generally have a significantly negative effect.
   – Strong Preparedness will typically have a positive effect.
   – Adequate Preparedness typically has minimal impact except when the ESG Profile score is greater than 85.
   – Emerging Preparedness will typically have a negative effect.

5. We may also raise or lower the ESG Evaluation score to reflect a risk or opportunity not fully captured under the individual Profile or Preparedness factors, or to ensure comparability with the ESG Evaluation of other entities.

The ESG Profile

6. The ESG Profile reflects our view of the current and near-term exposure of an entity to observable ESG risks and opportunities, relative to other entities. This analysis also takes into account our view of the near-to-medium-term effectiveness of the entity’s current governance and policy framework and trends in its operational performance. We assess 12 separate ESG factors for their potential to lead to a material financial impact on the entity, either directly or indirectly, if not mitigated.

7. We rank an entity’s ESG Profile on a 100-point scale. Entities with higher scores are, in our opinion, more likely to operate in sectors and locations with relatively lower ESG-related exposure, are more successful in managing their exposures, and are more likely to capitalize on ESG-related opportunities resulting from changes in their natural and social environments. They are also more likely to demonstrate stronger governance standards. As a result, we believe entities with higher scores will be more sustainable, less likely to suffer negative ESG-related material financial impacts, and better-positioned to capitalize on opportunities.

8. The ESG Profile is the combination of our assessment of three profiles: Environmental, Social, and Governance (see chart 2). In assessing each of these three profiles, we consider the following:

– A weighted sector- and region-based analysis of financially material ESG exposure, derived from the ESG Risk Atlas;

– For several factors, a qualitative and quantitative analysis of the entity's effectiveness at managing ESG-related risks and opportunities relative to other entities within its sector or globally, as well as its policies;

– Where appropriate, analytical judgment to describe risk and opportunities not fully captured under factor scores; and

– The forward-looking impact of material ESG-related events.

Chart 2

ESG Profile Building Blocks (Factors)

ESG Events

ESG events include disruption to operations or negative stakeholder attention related to a controversy, which we define as an adverse development that plays out in the public domain and could harm reputation materially and financially. Once identified as material, we attribute an event to the relevant ESG factor (for instance, workforce and diversity, or waste) or profile (for example, social or environmental)—as a flag to the report reader. There is no automatic or direct impact on the ESG Evaluation. Instead, past ESG events, if likely to have future impacts, could be a reason to apply analytical judgment to a factor or profile score.

Materiality is determined by the real or potential forward-looking financial impact on the entity, either directly or indirectly. A repeat or similar event is likely to lead to a negative adjustment because lessons might not have been learned and reputational or regulatory harm may be compounded. By contrast, an entity that has faced adverse events and actively mitigated the effects might benefit from its actions, so we could consider a reduced negative adjustment, or even, in rare cases, a positive adjustment.

Material events could include the following examples:

- Natural disasters
- Labor disputes
- Financial restatements
- Misdeeds of management

We generally note events and controversies that:

- Happened in the past 10 years
- Have been reported by one or more reputable source, or are self-disclosed to either the public or relevant stakeholders
- Could cause a material deviation of revenue, either by the entity's own estimates or credible third-party estimates
- Might be recurring, or have repeated at some point during the lookback period

Environmental Profile

9. The environmental profile (E Profile) describes the relative sustainability of an entity based on its environmental risks and opportunities compared to its sector or industry. Material environmental issues are ones that could potentially lead to a material financial impact on the entity, either directly or indirectly.

10. First, we apply the environmental sector and regional scores from the ESG Risk Atlas to derive a blended sector-region score. Then we consider four key entity-specific factors (greenhouse gas [GHG] emissions, waste, water, and land use) to determine whether the entity is actively and effectively managing its exposure compared with similar entities.

11. Finally, we combine the blended sector-region score with the assessments on four environmental factors to create the E Profile. The final E Profile is subject to a general adjustment to account for any company-specific material factors not already captured in the sector-, region-, or entity-specific analysis.

Risk Atlas Application

12. We incorporate the ESG Risk Atlas analysis into the E Profile by applying the relevant Risk Atlas assessments to an entity. For the E Profile, the most relevant assessments are the environmental sector score and regional natural disaster score.

13. We determine the proportion of the entity's operations that most closely resemble sectors in our Risk Atlas and weight the environmental sector scores accordingly to create a blend tailored to the entity. The blend for regional natural disaster exposure comes from where the entity operates.

14. To determine the entity footprint, we will review the breakdown of revenue, assets, employees, or exposure by sector and region and use the proportions that more accurately describe the entity's exposure to environmental risks and opportunities and natural disasters. As a result, the weighting factor could vary between companies within a sector.

Entity-Specific Analysis

15. To assess whether the entity is actively and effectively managing its exposure compared with other comparable entities in its sector, we consider its policies and selected key environmental indicators. We will take into account whether the entity's ESG exposure differs significantly from the norm for its sector given its particular makeup. We could reflect shortcomings in the data, recent or past controversies associated with a factor, or additional exposures or mitigation not addressed in the sector, natural disaster, policy, or key indicator analysis. Our analysis will consider the influence across the entity's entire value chain, upstream and downstream.

16. Selected indicators are specific to each factor. The policy analysis and adjustments by factor are similar (see table 1).

Table 1

Selected Indicators, Policy Analysis, And Adjustments By Factor

Selected Indicators	Policy Framework	Adjustments
For each factor in the E Profile, we compare the performance of the entity against sector data, where possible. In many cases, the sector data are not reliable, so we rely on a more qualitative analysis of the entity-specific data.	We assess the policy framework for a factor by considering, among other things, the entity's commitment to its policy, how compliance to the policy is measured, how breaches are remediated, whether the policy aims to improve environmental outcomes, and who is accountable for delivering on the policy.	Typical factor-level adjustments could reflect shortcomings in the data; publicly reported controversies associated with the factor; or additional exposures or mitigation not addressed in the sector, natural disaster, policy, or key indicator analysis. The degree of influence across the entity's entire value chain, upstream and downstream, can support adjustments.

17. We express the relative assessment for each factor compared with the sector average as one of five outcomes:

- Leading (in rare cases, when performance is demonstrably better than strong)
- Strong
- Good
- Lagging
- Weak (in rare cases, when performance is materially more negative than lagging)

18. Our analysis considers exposure across the entity's whole value chain. We assess exposure directly from the entity's fully owned operations; and indirectly from partially owned subsidiaries, suppliers, franchisees, licensees, lenders or underwriters, customers, taxpayers, and residents, to

determine if there could potentially be a material financial impact on the entity. An entity that positively influences environmental impacts across its supply chain and customer base--or through lending, investments, underwriting, or investment policy--is likely to have less exposure, all else being equal. We factor in the potential for material disruptions outside a company's own operations but within its value chain in our analysis.

GHG Emissions

19. We also assess how actively and effectively the entity is managing its direct and indirect exposure to GHG emissions risks and opportunities relative to other comparable entities in its sectors.

20. In addition to our policy analysis, key indicators are the intensity of Scope 1 and Scope 2 carbon dioxide equivalent (CO2e) emissions and their trends. CO2e intensity is measured by emissions divided by revenue, which we then compare to the CO2e intensity of other entities in the same sector. Lower-than-average intensity or a falling trend could also lead to a more favorable assessment.

21. Other considerations include:

- The methodology used for carbon accounting
- The use of carbon offsets
- Importance of Scope 3 emissions, both upstream and downstream
- Energy use, renewables, tracking, and targets

Waste And Pollution

22. We also look at how actively and effectively the entity is managing its direct and indirect exposure to waste and pollution risks and opportunities relative to other comparable entities in its sectors.

23. In addition to our policy analysis, key indicators are the proportion of waste recycled, the current level of recycling, and the trend. Greater-than-average recycling for a sector and an increasing trend are likely to indicate a more favorable assessment.

24. Other indicators we consider include:

- Hazardous waste
- Air, water, and land pollution
- Use of sustainable packaging

Water Use

25. We analyze how actively and effectively the entity is managing its direct and indirect exposure to risks and opportunities related to water scarcity or competition for resources relative to other comparable entities.

26. In addition to the policy analysis, key indicators are the entity's levels of water intensity, proportion of water recycled or reused, and amount of water drawn from the natural environment and stressed water regions in particular. Lower-than-average water intensity or a higher proportion of recycled water generally lead to a more favorable assessment.

27. Other indicators to consider include:

- Measurement of water consumption
- Units of water used per unit of production

Land Use

28. We look at how actively and effectively the entity is managing its direct and indirect exposure to risks and opportunities related to land development and potential impact on biodiversity relative to other comparable entities.

29. We weight our assessment more toward our policy analysis (see table 1) than key indicators. Other important indicators are:

- Direct and indirect operations in sensitive areas for plant and animal life
- Greenfield development activity
- Deforestation activity, especially related to soy, palm oil, timber, or cattle

Final E Profile And General Adjustment

30. The E Profile combines the entity-specific assessments with the blended sector-region score to produce a ranking on a 100-point scale. A higher rank reflects our view that the entity is operating in sectors and regions with relatively lower environmental exposures, more effectively managing its exposure, more likely to take advantage of changes in the natural environment, and less likely to experience negative financial consequences from its environmental exposure. The four environmental factors might carry different weights by sector or region to capture their relative importance in our E Profile assessment.

31. The general E Profile adjustment is available to reflect risks and opportunities affecting the E Profile not fully captured in the four factors. Typical reasons to apply a general adjustment include:

- Relative strength or weakness in the entity's environmental management system
- Materiality or severity of environmental risks or opportunities not fully captured
- General policy strengths or deficiencies
- The use of natural capital protocols or recognized environmental certification
- Significant outperformance or underperformance not fully captured in the factor assessments
- Any environmental factor not specifically reflected in the factor assessments
- Major events or controversies affecting multiple factors
- The potential impact of rising sea levels on an entity
- Comparisons with the E Profiles of other companies

Social Profile

32. The social profile (S Profile) describes the relative sustainability of an entity and stakeholders based on risks and opportunities to its social license to operate, compared to its sector or industry. A social license to operate reflects the continuous acceptance of an entity's practices by the public. Material social issues are those that could potentially lead to a material financial impact on the entity, either directly or indirectly.

33. First, we apply the social sector score to the entity's footprint to derive a blended sector-region score. Then we consider four key entity-specific factors (workforce and diversity, safety management, customer engagement, and communities) to determine how the entity is actively and effectively managing its exposure to social risks and opportunities compared with other comparable entities. Finally, we combine the blended sector-region score with the assessments

on four social factors to create the S Profile on a 100-point scale. The final S Profile is subject to a general adjustment to account for any relevant considerations not already captured in the sector-, region-, or entity-specific analysis. This could occur if there are additional risk factors outside the four specified above, or material events that affect numerous risk factors.

Risk Atlas Application

34. We incorporate the ESG Risk Atlas analysis into the S Profile in a fashion somewhat consistent with how we apply it in the E Profile. The relevant assessment is the social sector score; we may adjust the S Profile score for regional variation in social standards or exposure to natural disasters.

Entity-Specific Analysis

35. To analyze whether the entity is actively and effectively managing its exposure compared with similar entities, we assess existing social policies and performance on selected key social indicators. We may then selectively adjust these factors as needed to ensure consistency and comparability. We express the same five possible outcomes in the S Profile entity-specific analysis:

   – Leading (In rare cases, when performance is demonstrably better than strong)
   – Strong
   – Good
   – Lagging
   – Weak (in rare cases, when performance is significantly more negative than lagging)

36. The social analysis, like the environmental analysis, also considers exposure across the entity's whole value chain. The analysis includes assessing exposure directly from the entity's fully owned operations; and indirectly, from partially owned subsidiaries, suppliers, franchisees, licensees, lenders or underwriters, customers, taxpayers, and residents, to determine if there could be a material financial impact on the entity. An entity that positively influences social impacts across its supply chain and customer base--or through lending, investments, underwriting, or investment policy--is likely to have less exposure, all else being equal. For example, a government enterprise could be more active and effective in managing its exposure by positively influencing constituents both inside and outside its jurisdiction, through its policies. Our analysis includes potential material disruptions outside an entity's own operations but within its value chain.

Workforce And Diversity

37. Our analysis incorporates how actively and effectively the entity is managing its direct and indirect exposure to risks and opportunities related to its employees and workforce diversity relative to other comparable entities.

38. We weight our assessment more toward our policy framework analysis for workforce and diversity. Trend analysis is behind our quantitative analysis and we use combined sector data when available to compare entity-specific performance. Important factors that we consider in our qualitative and quantitative analysis to complement our analysis of an entity's policy framework include the following:

   – Trends in diversity and inclusion
   – Talent acquisition, training, retention, absenteeism, and turnover

- Labor standards, pay, benefits, and rewards
- Engagement in ensuring fair and humane labor standards across the value chain

Safety Management

39. We evaluate how actively and effectively the entity is managing its direct and indirect exposure to risks and opportunities related to safety among its workforce, customers, suppliers, and communities local to its operations relative to other comparable entities.

40. We weight our assessment more to our policy analysis for safety management (see table 2). We use trend analysis in our quantitative analysis and combined sector data when available to compare entity-specific performance. Important factors that we consider in our qualitative and quantitative analysis to complement the policy analysis include:

    - Occupational health and safety for all employees (permanent, temporary, and contractors)
    - Trends in workplace accidents and fatalities
    - Product safety and recalls
    - Engagement in safety management across the value chain

Customer Engagement

41. We look at how actively and effectively the entity is managing its direct and indirect exposure to risks and opportunities related to how it engages with customers, constituents, or residents relative to other comparable entities.

42. Our assessment is weighted more to our policy analysis for product safety and data privacy (see table 2). As above, we use trend analysis for our quantitative analysis and combined available sector data to compare entity-specific performance. Important factors that we consider in our qualitative and quantitative analysis include the following:

    - Trends in customer satisfaction and complaints
    - Protection of customer information

Communities

43. We evaluate how actively and effectively the entity is managing its direct and indirect exposure to risks and opportunities related to its engagement with local communities relative to other comparable entities. In our opinion, less exposed entities have built up social capital in local communities and are less likely to lose their social license to operate following a controversy with a plant, mine, or operation.

44. We weight our assessment more to our policy analysis for human rights and social standards in the supply chain (see table 2). As above, we use trend analysis for our quantitative analysis and available combined sector data to compare entity-specific performance. Important factors that we consider in our qualitative and quantitative analysis to complement the policy analysis include the following:

    - Engagement with the local communities of direct operations and of suppliers
    - Exposure to war, other conflicts, and terrorism

Final S Profile And General Adjustment

45. As with the E Profile, the S Profile combines the entity-specific assessments with the blended sector-region score to produce a ranking from 1-100. A higher rank indicates our view that the entity is operating in sectors and regions with relatively lower social exposure, more effectively managing its exposure, more likely to take advantage of changes among stakeholders, and less likely to experience negative financial consequences from its social exposure relative to other entities. The four social factors might carry different weights by sector to capture their relative importance in our assessment. For example, the importance of communities might be weighted more toward the high street retailers than the business services sector.

46. The general adjustment reflects risks and opportunities affecting the S Profile that the four factors might not fully capture. Typical reasons we would apply a general adjustment include the following:

- Relative strength or weakness in the entity's social management system
- Materiality or severity of social risks or opportunities not fully captured elsewhere
- General policy strengths or deficiencies
- Use of third-party protocols or recognized certifications for social standards
- Significant outperformance or underperformance not fully captured in the factor assessments
- Any social factor not specifically captured in the factor assessments
- Major events or controversies impacting multiple factors
- Comparisons with the S Profiles of other companies

Governance Profile

47. The governance profile (G Profile) reflects our view of the extent to which observable governance standards and practices could indicate that the entity is likely to experience a significant governance failure relative to other entities on a global basis. Again, we determine relevance by the potential of a governance feature to lead to a material financial or reputational impact, either directly or indirectly, on the entity.

48. Our analysis of corporate and institutional governance is a fundamental element of the ESG Evaluation. Our focus in the G Profile is on the near-term governance structure and facts that we can observe about governance today. Separately, we assess the influence of governance on the entity's long-term strategy, planning, and resulting culture in Preparedness, as discussed further below.

49. First, we apply the jurisdiction-based scores to the entity based primarily on the location of its head office. Then we consider four key entity-specific factors (structure and oversight, code and values, transparency and reporting, and cyber-risk and technological systems) to determine whether the entity is actively and effectively managing its exposure to governance risks and opportunities compared with all entities on a globally consistent basis. We weight the entity-specific analysis in the G Profile more than for E Profile and S Profile because entities with strong governance standards can more than offset any potential weakness in a country or region.

50. Finally, we combine the blended region score with the assessments on the four aforementioned governance factors to create the G Profile on a scale of 1-100. The final G Profile is subject to a general adjustment to account for any relevant considerations not already captured in the region or entity-specific analysis.

Risk Atlas Application

51. We incorporate the ESG Risk Atlas analysis into the G Profile by applying the relevant Risk Atlas assessments to an entity. These assessments differentiate regions by governance standards, practices, and quality of ESG-focused regulation. The analysis leverages opinions from our sovereign rating team and data used in our country risk analysis. Higher scores reflect our view that strong entity-level governance is supported by laws and regulations and strong domestic public institutions, either at the national or subnational level, that prove effective in monitoring compliance, defending the rule of law, and reducing corruption.

Entity-Specific Analysis

52. To assess whether the entity-specific governance standards and practices are relatively stronger than best practice or weaker than accepted local norms, we assess the policies in place, governance features, and cyber-risk exposures more absolutely than for the environmental and social analyses. We might then selectively adjust these factors as needed to ensure consistency and comparability.

53. We assess each factor as one of the following:

   - Leading (in rare cases, when standards are consistently stronger than international best practice for a sustained period)
   - Strong
   - Good
   - Developing

Structure And Oversight

54. In our analysis, we review what features of the entity's governance structure and oversight suggest that the entity has relatively stronger or weaker standards than other entities on a global basis.

55. We have identified the key features of best-practice governance structure and oversight. We assess how many of these features are present to assess the entity relative to global best practices.

56. Key features include:

   - Composition, skills, tenure, diversity, and independence of the governing body
   - Committee structures and their membership
   - Degree of commitment to board duties
   - Succession planning and unexpected changes
   - Incentives set by the board

Code And Values

57. Compared to accepted governance standards and practices, we evaluate the features of the entity's code and values that suggest that the entity has relatively stronger or weaker standards on a globally consistent basis.

58. We have identified the key features of best-practice governance code and values. We look at how many are present to assess the entity relative to best practices.

59. Key features include:

- Comprehensiveness of the policy framework
- Code of conduct and its application across the value chain
- Public statements about ethics and values
- Training and compliance framework

Transparency And Reporting

60. We also look at whether transparency and reporting is relatively stronger or weaker than normal, especially compared with international peers.

61. Key features of our analysis include the following:

- Level of disclosure of ESG indicators
- Publication of a detailed annual sustainability report
- Level of disclosure on taxation issues

Cyber-Risk And IT Systems

62. We analyze how, compared to the average level of cyber exposure for this type of entity, this company is more or less exposed on a global basis.

63. Key features of our review include:

- The level of preventive and remedial actions
- Sufficiency of cybersecurity procedures
- Responsibility of the board for cybersecurity

Final G Profile And General Adjustment

64. The G Profile combines the entity-specific assessments with the region score to produce a ranking from 1-100. A higher rank indicates our view that the entity operates in jurisdictions with relatively stronger governance standards and practices; has features that are closer to best practices in terms of structure, values, and reporting; is less exposed to cyber-risks; and is less likely to experience negative financial or reputational consequences from governance failures.

65. The general adjustment is available to capture risks and opportunities we see as affecting the G Profile that are not fully captured in the regional assessment and four entity-specific factors. Typical reasons to apply a general adjustment include the following:

- The materiality or severity of governance strengths or failures not captured elsewhere
- General policy strengths or deficiencies
- Any observable governance factor not specifically captured in the factor assessments
- Major events or controversies affecting multiple factors
- Other participants in the value chain who might have particularly weak or strong governance attributes
- Limitations based on relationships with parent companies, sponsors, or government-related entities
- Comparisons with the G Profiles of other entities

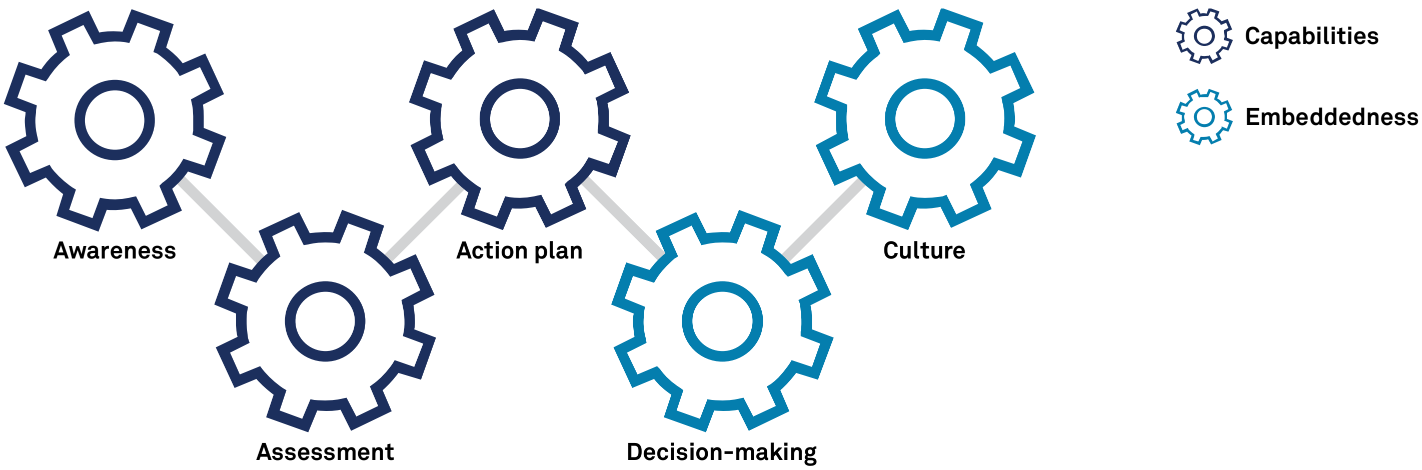
Long-Term Preparedness

66. The long-term Preparedness opinion reflects our qualitative view of an entity's capacity to anticipate and adapt to a variety of plausible long-term disruptions and therefore support the entity's long-term sustainability (see chart 3). These disruptions are not limited to environmental and social scenarios, but could also include technological, political, or other cases. This is because, in our opinion, high-quality corporate or institutional governance includes evaluating the full spectrum of potential risks and opportunities an entity faces. Our Preparedness assessment is, in part, informed by a meeting with the management team and board representation.

67. First, we expect to assess senior management's and the board's capabilities with respect to their awareness and assessment of long-term risks and opportunities, as well as associated long-term planning. We also consider the extent to which the entity's board and management (or, in the case of public entities, elected and appointed leadership) have embedded environmental, social, and other long-term strategic considerations and potential scenarios into their decision-making; and the extent to which this is evident in the entity's culture.

Chart 3

Long-Term Preparedness



68. We judge each factor as Developing, Good, or Excellent. We expect to assess most factors as Good, and use Excellent and Developing to capture demonstrable strengths and weaknesses by factor. Various combinations of these assessments lead to our overall Preparedness opinion as one of the following:

- Best in class
- Strong
- Adequate
- Emerging
- Low

69. Awareness is the most important factor and is weighted more significantly as a result. Any Developing judgment constrains the opinion significantly and cannot be averaged out by Excellent judgments in other factors.

70. For all factors in Preparedness, we assess both the role and impact of the oversight or governing body (board or elected officials) and senior management (c-suite or appointed leadership). The

oversight or governing body and how it is connected with senior management carries more weight in Awareness and Assessment. Senior management carries more weight in Decision-Making and enabling the conditions for Culture.

Capabilities

71. We base our analysis of Capabilities on the belief that successful action requires first acknowledging and understanding the risks ahead. No amount of scenario planning or action planning can compensate for a lack of awareness of emerging and strategic risks and opportunities.

Awareness

72. In Awareness, we assess how capable and effective the entity's management is in recognizing potential strategic and emerging risks and opportunities. Our premise is that entities that proactively and routinely identify risks to their strategic vision should be better prepared to navigate uncertainty. We expect an entity, including board members, to discuss with us material emerging and strategic risks to fulfilling their strategy, the process for risk identification, and how often they conduct their long-term strategic reviews. In our opinion, high awareness is a prerequisite for a stronger Preparedness opinion; that is, if management is unaware of emerging risks, it cannot realistically mitigate them. For instance, a retail company that has yet to consider how greater environmental awareness might affect consumer preferences could receive a Developing assessment.

Assessment

73. For Assessment, we look at how capable and effective the entity's management is in examining the potential range of impacts that the issues identified in Awareness could have on the operations and the strategy of the entity. We explore how the entity uses scenario planning or similar techniques to understand these potential operational and strategic impacts and to self-assess which organizational capabilities might need to change. We can also consider the comprehensiveness of the entity's risk-optimization process and tools. For instance, an entity that has identified climate change as a material issue and considers a number of long-term climate scenarios--such as a 2°C scenario and higher emitting scenarios of 3°C and 4°C--to size potential exposure and opportunity impacts could be Good or Excellent. We might consider a different entity that has identified climate change as an issue and is in the early stages of quantifying or measuring any potential impact on operations as Developing. The Assessment analysis is not limited to environmental and social scenarios, but could include technological, political, or other scenarios where relevant.

Action Plan

74. In Action Plan, we assess how capable and effective senior management is in planning to manage, mitigate, or exploit risks and opportunities already identified in Awareness. We believe entities that have identified contingency plans for optimizing operations under various plausible scenarios will be more successful. Clear decision-making processes, and a common understanding of roles, responsibilities, and risk tolerance levels, are key to ensure effective action. If provided, we consider examples of management's track record of actions taken in line with action plans previously developed and linked to long-term strategy. A heavily carbon-intensive company that is executing a decarbonization plan developed in response to a strategic review of how carbon pricing could affect operations could be considered Excellent. However, a company that has

significant exposure to potential emissions costs in coming years but has yet to develop a plan to divest assets or migrate to cleaner assets might be Developing.

Embeddedness

75. The Embeddedness factors indicate how adaptable and agile the entity is to any change, which indicates whether an entity is likely to take advantage of the opportunities and avoid or limit the impact of emerging or strategic risks.

Culture

76. In Culture (bottom up), we assess how embedded and effective are strategic objectives, particularly those related to ESG, across the entire organization and its key stakeholders. We consider how management motivates the right behavior across the organization to achieve its long-term goals, such as through training and communication. This could indicate the agility in an organization. The extent to which an entity can respond and adjust to changes based on feedback from all levels can make the company more adaptable. The manner and tone in which a company demonstrates its ESG focus through engagement with stakeholders provide further insight. For instance, an entity whose employees are actively engaged in developing good relations with local communities or reducing energy use or waste in line with strategic objectives could be Good or Excellent. On the other hand, one in which management has yet to train employees on potential cyber-risks or which is only just beginning to engage staff and the community in developing ideas to reduce water consumption and improve recycling could be Developing. This could indicate that management has some way to go before being fully connected with the organization and its key stakeholders with its strategic objectives.

Decision-Making

77. For Decision-Making (top down), we assess how embedded and effective strategic objectives, particularly those related to ESG, are in influencing senior management decisions. An explicit focus on integrating high-quality ESG factors into day-to-day decision-making processes can differentiate an entity. We develop an opinion on management's track record by considering examples of recent actions and their alignment with the long-term strategy, such as decisions on capital expenditure or acquisitions. We also believe the extent to which the board has linked management's long-term compensation to ESG measures as an indicator of the importance the organization places on ESG factors. For instance, a power company or utility that is considering purchasing coal-fired generation assets might be Developing because this does not seem to be consistent with its ESG-related goals. On the other hand, an entity that can point to data that show successful efforts to diversify its workforce in recent years according to its stated strategy, especially if c-suite compensation is linked to diversity outcomes, could be assessed as Excellent.

Climate-Related Financial Disclosures

78. At the company's request, we will indicate to what extent the company has adopted the Financial Stability Board's Taskforce on Climate-related Financial Disclosures' (TCFD) recommendations. We will not opine on the quality of the company's disclosure or the climate change scenario assumptions, if any. However, we will comment on the proportion of metrics and targets disclosures made based on the TCFD's suggested disclosure list.

79. The outcome of our assessment is either Adopted, Partially Adopted, or Not Adopted. Adopted reflects our belief that all the company has made 11 of the recommended disclosures and will

continue to report them. Not Adopted indicates that the company has made none of the TCFD's 11 recommended disclosures (in its financial filings or other public reports). Where we believe the company has partially adopted the recommendations, we will indicate which recommendations the entity has implemented.

Table 2

TCFD Sample Alignment Assessment

Governance	Strategy	Risk management	Metrics and targets
Describe the board's oversight of climate-related risks and opportunities.	Describe the climate-related risks and opportunities identified over the short, medium, and long term.	Describe the organization's processes for identifying and assessing climate-related risks.	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
Not adopted	**Adopted**	**Adopted**	**Adopted**
Describe management's role in assessing and managing climate-related risks and opportunities.	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Describe the organization's processes for managing climate-related risks.	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.
Adopted	**Adopted**	**Adopted**	**Adopted**
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.
	Adopted	**Adopted**	**Adopted**

Related Research

- How To Navigate The ESG Risk Atlas, April 11, 2019
- FAQ: How We Apply Our ESG Evaluation Analytical Approach, April 10, 2019
- The ESG Advantage: Exploring Links To Corporate Financial Performance, April 8, 2019
- When U.S. Public Finance Ratings Change, ESG Factors Are Often The Reason, March 28, 2019
- How Management & Governance Risks And Opportunities Factor Into Global Corporate Ratings, Nov. 7, 2018
- How Environmental, Social, And Governance Factors Help Shape The Ratings On Governments, Insurers, And Financial Institutions, Oct. 23, 2018
- The Rise Of ESG In Fixed Income, Sept. 10, 2018
- How Social Risks And Opportunities Factor Into Global Corporate Ratings, April 11, 2018
- How Environmental And Climate Risks And Opportunities Factor Into Global Corporate Ratings - An Update, Nov. 9, 2017

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