

MSCI ESG Ratings FAQs for Corporate Issuers

MSCI ESG Research LLC

October 2022



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1. Introduction

This guidance document provides a summary overview of the ESG Ratings methodology used by MSCI ESG Research and answers frequently asked questions (FAQs) about MSCI ESG Ratings and the underlying environmental, social and governance data. For questions pertaining to your ESG Research reports or our process for interacting with companies, please refer to our general FAQ for corporate issuers. A library of additional resources can be found on the ESG Issuer Communications Portal. ESG Issuer Communications is the main point of contact for companies in the MSCI ESG Research coverage universe.

2. MSCI ESG Ratings Overview

MSCI ESG Ratings are designed to help institutional investors identify Environmental, Social and Governance (ESG) risks and opportunities. Companies are assessed and rated on a 'AAA' to 'CCC' scale according to their exposure to industry-specific ESG risks and their ability to manage those risks relative to ESG Rating industry peers. We rate over 10,000 companies (15,000 issuers, including subsidiaries) and more than 680,000 equity and fixed income securities globally. Below are the four key steps in providing an ESG Rating.

Step 1: Evaluate Corporate Governance

MSCI ESG Ratings analysis begins with an examination of corporate governance, including director-level data and governance events. Governance includes six universal Key Issues in the Corporate Governance and Corporate Behavior themes, which are evaluated for every company in our coverage universe.

Step 2: Identify Key Issues by Industry

The model adopts a quantitative approach to objectively identify financially relevant Key Issues (risks and opportunities) by industry. Once Key Issues are identified at the industry level, they are assigned to each company within the industry. MSCI ESG Ratings identifies six to ten key ESG issues for companies in the industry that currently generate large environmental or social externalities; these are issues that may force some companies to absorb unanticipated costs associated with those externalities in the future.

Step 3: Score Key Issues (0-10)

We assess thousands of data points across a total of 35 ESG Key Issues, focusing on the intersection between a company's core business and the industry issues that can

¹ As of June 2022, MSCI ESG Research LLC



create significant risks and opportunities for the company. However, our model focuses on risk exposure and not just corporate disclosure. To understand whether a company is adequately managing a key ESG risk, it is essential to understand both what management strategies it has employed and how exposed it is to the relevant risk. The MSCI ESG Ratings model measures both: risk exposure and risk management. All 35 Key Issues are listed in Appendix 1.

Step 4: Final ESG Rating (AAA-CCC)

To arrive at a final letter rating, the weighted averages of the Key Issue Scores (WAKI) are aggregated and companies' scores are normalized by their industries. After any overrides are factored in, each company's final Industry-Adjusted Score (IAS) corresponds to a letter rating from industry leader (AAA) to laggard (CCC). These assessments of company performance are not absolute but are explicitly intended to be relative to the standards and performance of a company's industry peers.

Please see question 3.1 for more information on the construction of peer sets by industry.

3. Frequently Asked Questions

Below is a curated list of the most common questions related to ESG Ratings methodology that are received by ESG Issuer Communications from global companies.

GENERAL ESG RATINGS MODEL QUESTIONS

3.1 How are peer sets constructed?

ESG Rating Industries are based on the Global Industry Classification Standard (GICS®)², where applicable, which we group to form peer sets in which companies face relatively similar Key Issues. As a result, each ESG Rating Industry can be mapped to a GICS sub-industry, a GICS Industry, or several GICS sub-industries. The exception is supranationals and development banks, which are not covered in the GICS framework.

Companies are assigned to ESG Rating Industries based on the company's GICS classification (if available) or based on MSCI ESG Research's determination if no GICS classification is available (e.g. private or unlisted companies).

² GICS, the global industry classification standard jointly developed by MSCI Inc and S&P Global Market Intelligence.



Please note that the peers listed in the ESG Ratings report are the **five largest MSCI ACWI Index peers by market cap** in the ESG Rating Industry. It is only a subset of the peer set, not the full list.

3.2 How are Key Issues determined?

ESG Key Issues are determined at the GICS sub-industry level by a quantitative model based on intensity factors that allow comparability of different companies' core businesses. All Key Issues and their relevance are reviewed by industry analysts annually and are discussed with clients as part of the annual client consultation process, where appropriate. Environmental and Social Key Issues vary between GICS sub-industries, but companies are evaluated on the six Governance Key Issues. ESG Key Issues are selected based on the extent to which the business activities of the companies in each industry generate large environmental, social or governance-related externalities.

3.3 How are Key Issue weights determined?

Once Environmental and Social Key Issues have been selected for a GICS sub-industry, we set the weights that determine each Key Issue's contribution to the overall rating. The weightings consider both the 1) contribution of the GICS sub-industry, relative to all other GICS sub-industries, to the negative or positive impact on the environment or society as well as the 2) timeline within which we expect the risk or opportunity for companies in the industry to materialize. This is illustrated conceptually below (excerpt from the ESG Ratings Methodology).

Figure 1. Framework for Setting Key Issue Weights

		Expected Time frame for Risk/Opportunity to Materialize		
		Short-Term Long-Term (<2 years) (5+ years)		
Level of Contribution to	Industry is <u>major</u> contributor to impact	Highest Weight		
Environmental or Social Impact	Industry is <u>minor</u> contributor to impact		Lowest Weight	

3.4 My company has a variety of businesses/my company's business is different from our GICS sub-industry peers. How do you account for business specificities at a Key Issue level?

In some cases, a company may face a unique set of environmental, social or governance Key Issues that is not shared by other companies in its industry. This can



arise from several scenarios, ranging from companies with unique or diversified business models to subsets of companies within an industry that face a unique set of risks. In these cases, a company-specific Key Issue is added to the analysis and the weights on the remaining Key Issues are reduced proportionally.

3.5 How is risk exposure determined?

Most Key Issues, although not all, consist of two components: risk exposure and risk management. This dichotomy allows the model to adjust the strength of management systems required to achieve a given Key Issue score: companies that face higher risk exposure must have stronger management practices in place to mitigate their risks.

On the risk side, MSCI ESG Research has developed a proprietary risk exposure model. Our assessment of exposure is comprised of three different areas of analysis, depending on the Key Issue:

Business Segment Risk Exposure – analyzes the breakdown of a company's business segments in terms of revenues, assets, or operations.

Geographic Segment Risk Exposure – analyzes the breakdown of a company's geographic segments in terms of revenues, assets, or operations.

Company-Level Risk Exposure factors – such as number of employees, size, reliance on government contracts, or reliance on outsourced production, among others.

We utilize a variety of sources to determine the risk exposure level/scores for each of these areas.

Using the Labor Management Key Issue as an example, imagine Company X's risk exposure is determined to be high based on the type of business it is involved in (percentage of operations in business segments with high labor intensity, as measured by average sales per employee) and the locations of its operations (percentage of operations in countries with high likelihood of labor unrest, based on historic precedent). The Key Issue also looks at additional factors, such as workforce size and recent restructuring. The exposure side of this assessment does not consider Company X's track record in avoiding labor disputes or work stoppages. This would be a performance measure evaluated under the risk management side of the Key Issue assessment as an indication of the efforts the company undertakes to address its risk exposure.

3.6 How is the WAKI score converted to the IAS?

The Industry-Adjusted Score (IAS) is defined by the Weighted Average Key Issue score (WAKI) and normalized based on score ranges set by the companies in the ESG Rating



Industry peer set. The following criteria is applied in setting the industry top and bottom benchmark values:

- The top benchmark value ("industry maximum score") falls between the 95th and 100th percentile of modeled weighted average key issue scores (WAKIS) within an ESG Rating Industry.
- The bottom benchmark value ("industry minimum score") falls between the 0th and 5th percentile of modeled weighted average key issue scores (WAKIS) within an ESG Rating Industry.

Percentiles are calculated based on the full universe of companies with ESG Ratings (~10,000 companies).

These assessments of company performance are not absolute but are explicitly intended to be relative to the standards and performance of a company's ESG Rating Industry peers.³

3.7 Our company's weighted average Key Issue score (WAKI) has changed, but the Industry-Adjusted Score (IAS) remains the same. Why?

The Weighted Average Key Issue score is dynamic, reflecting changes in any underlying scores as of the "Last Update" date, while the Industry-Adjusted (relative) Score is relatively static and corresponds to the "Rating action date." To reduce rating volatility, the IAS is not automatically recalculated unless a full analyst review has taken place. In cases where a company's Weighted Average Key Issue Score is significantly impacted by these updates, i.e., if its Preliminary Industry Adjusted Score surpasses the midpoint of the next letter-rating range, it may be queued for a full review and potential re-rating.

For more about score update timing, please refer to 3.1 in our general FAQ for corporate issuers.

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³ The ESG Issuer Communications team cannot discuss the assessments of a company's peers. However, if you are interested in our peer benchmarking product, you may contact our Corporate Sales team: esg_corporate_sales@msci.com



KEY-ISSUE SPECIFIC QUESTIONS

3.8 We don't report carbon emissions data. Where did the emissions data come from?

Where companies do not report this information, MSCI ESG Research provides estimates based on our proprietary carbon estimation methodology. If your company does report carbon emissions data publicly, we encourage you to submit this information through the ESG Issuer Communications Portal, including the source link to where this information can be found in the public domain. We will review and make the necessary updates, replacing the estimates where appropriate.

You can provide this feedback on our <u>Issuer Communications Portal</u> under MY DATA → Carbon.

3.9 What is included in the R&D expenses for the Opportunities in Clean Tech Key Issue?

In general, we capture R&D expense data from the consolidated financial statements disclosed by the company in its annual report. If the company reports a breakdown of its R&D expenses that separates out Capitalized R&D from R&D expenses recognized as costs, we exclude the capitalized amount and report the remaining figure. We do not consider R&D capitalized cost as part of the Research and Development expenses at this point in time. Capitalized cost is considered to be an asset, and thus not included in R&D expense.

Furthermore, we report the figures disclosed by the company in its annual report for that specific fiscal year. If the company restated its expenses based on any changes in accounting principles, we would not restate historical figures since it would not accurately reflect the amount reported by the company in the previous years. Likewise, if the restatement was due to a corporate event (e.g., an acquisition or spin-off), we would not restate historical figures, since it would not accurately reflect the amount of R&D expenses that the company had at the time.

We use USD as the main currency. If the company reports R&D expenses in local currency, this is converted to USD using the exchange rate date as of the fiscal year end date of the company. Any discrepancies between the numbers might be caused by foreign exchange rate differences. We do not typically update minor discrepancies on an ad-hoc basis.



3.10 What is the best practice for frequency in employee engagement surveys?

General best practice in terms of frequency of employee surveys is annual. Per our scoring, a company that conducts engagement surveys at any other regular frequency (e.g., every two years) will typically be assessed as "sporadically." While we are always looking to refine our indicators, this is currently the standardized scoring level.

3.11 Our company believes that not having a labor union is an indication of strength in our labor management, but MSCI ESG Research appears to score us negatively for our low unionization rate. Why is this?

MSCI ESG Research does not have an official position on merits of unionization. However, for our Labor Management Key Issue, we use unionization rate as a proxy for the presence of basic employee rights and benefits. Therefore, in this context, a higher unionization rate would score more positively for this indicator. Having said that, a company with a low or no unionization rate could still receive a higher management score if it demonstrated strong performance on all other metrics.

3.12 How is the score for tax transparency determined?

Companies are evaluated on their estimated corporate tax gap (i.e., gap between Estimated Corporate Effective Tax Rate and Estimated Statutory Tax Rate), level of revenue-reporting transparency, and their involvement in tax-related allegations and controversies.

A company's estimated tax gap will impact the Corporate Behavior Theme Score and Governance Pillar Score when there is an ongoing tax controversy. The maximum score deduction from the Corporate Behavior Theme Score is 2.0. A maximum deduction will occur when the tax gap is greater than 10 percentage points.

GENERAL CORPORATE GOVERNANCE QUESTIONS

3.13 What makes up the Corporate Governance assessment?

As mentioned in the 'MSCI ESG Ratings Overview' above, companies are assessed on governance issues. MSCI ESG Ratings provide corporate governance research and data on approximately 10,000 public companies worldwide.⁴ The assessment model

⁴ As of March 2022, MSCI ESG Research LLC



is based on a set of unique metrics organized into four individual scoring Key Issues (Ownership & Control, Board, Pay and Accounting).

- Ownership & Control: The ownership structure of an issuer represents one of the most fundamental dimensions of governance risk. A clear understanding of the relative strengths and weaknesses of the various ownership models and control structures presented by issuers can help identify the most relevant governance concerns faced by investors. The most common principal-agent concerns are applicable primarily to widely held companies with highly dispersed ownership. For closely held companies, however, governance risk is more often a function of the identity and degree of control wielded by the company's dominant shareholders.
- Board: The Board Key Issue is scored primarily based on the board's independence from management, and on various measures of board skills and diversity, and overall board effectiveness. Negative impact governance-related events such as delisting threats or bankruptcies, securities litigation or regulatory investigations, or malfeasance or fraud involving individual executives or directors, are also included in this section. While not generally applicable to most companies, and thus not assigned a separate component ranking, such event-based metrics can have a significant impact on a company's overall governance scoring.
- Pay: CEO and other executive pay practices are evaluated for companies, including, where disclosed, specific pay figures. Pay is scored primarily based on how well incentives have been linked to performance, and on levels of pay relative to peers, as well as specific key features of a company's overall pay plan design.
- Accounting: The Accounting Key Issue is focused on the audit firm and their
 independence and tenure, the content of the auditor report, as well as certain
 events which may raise concerns as to the quality of the accounting and
 audit processes such as restatements, accounting investigations late filings.
 Goodwill writedowns and other special charges are also assessed here, as a
 management quality factor.

You may see Appendix 2 for additional details and key metric definitions.

3.14 How is the Corporate Governance assessment scored?

The Corporate Governance score is an absolute assessment of a company's governance strength or weakness, using a 0-10 point scoring scale. Each company starts with a "perfect 10" overall score, to which scoring deductions are applied based



on the assessment of a proprietary set of individual key metrics, which are organized into four Key Issues (Ownership & Control, Board, Pay and Accounting).

Similarly, calculated 0-10 scores are also provided for each of these four Key Issues, but these scores are calculated independently of the overall Corporate Governance Score, which is based on the total number of scoring deductions for all four Key Issues, as shown in the scoring deductions table provided in each company's report.

The corporate governance scoring process is fully automated and applied consistently to companies. Input data is collected and reviewed on an ongoing basis throughout the year, automatically updating the key metrics that drive our overall assessments and scores. Data flows into the model are subject to different timings, depending on the nature of the data, but are generally well-aligned with corporate disclosure and news.

You may see Appendix 2 in this document for additional details.

3.15 When do corporate governance updates take place?

Corporate governance data updates are made independently from Environmental and Social data updates. At the time of the ESG Ratings Review, the ratings analyst team references whatever governance data is available at that time. Any subsequent changes or updates will flow to the respective assessment(s). Issuers may also provide feedback at any point throughout the year via the Issuer Communications Portal.

CORPORATE GOVERNANCE QUESTIONS: BOARD

3.16 What are MSCI ESG Research's director overboarding standards?

MSCI ESG Research's criteria references global best practices and may be stricter than local regulatory requirements or a company's own definitions. Per MSCI ESG Research methodology, there are two standards:

An **executive director** is considered overboarded if they serve on a total of three or more boards (including the rated company) of companies included in the MSCI ESG Research coverage universe, including both equity and debt issuers.

A **non-executive director** is considered overboarded if they serve on a total of four or more boards (including the rated company) of companies included in the MSCI ESG Research coverage universe, including both equity and debt issuers.



3.17 What is the process and criteria used to determine the "Flagged Directors on Board" key metric?? Does this flagging have an expiration date?

The Flagged Directors on Board Key Metric identifies directors whose prior board service includes a company that was involved in a corporate bankruptcy or other major loss of shareholder value. Directors are only flagged if their board service began at least one full year prior to the triggering event. As the flagging of a director is intended to be focused on a directors' track record, it does not have an expiration date.

3.18 What criteria is used to determine if a board is considered entrenched?

There are four different scenarios which trigger this key metric.

- More than 35% of the board has a tenure greater than 15 years;
- More than 22% of the board has a tenure greater than 15 years and more than 15% of the directors are over 70;
- There are more than four directors whose tenure is greater than 15 years;
- There are more than four directors who are over 70.

3.19 Our company has had a majority voting policy in place for several years. Why is the company still flagged for this?

MSCI ESG Research has a strict standard for majority voting policies in director elections that flag plurality, plurality plus resignation, and majority plus resignation standards as falling short of MSCI's minimum standards. MSCI criteria requires that a director who does not receive a majority of votes cast depart from the board immediately.

3.20 What is the required threshold and relevant time period that results in the flagging of the "Significant Votes Against Directors" Key Metric? What is considered "significant"?

This key metric is flagged if one or more directors receive a "negative" or "withheld" shareholder vote equal to or in excess of 10% at the most recently reported election by a company (or in certain markets on the discharge of the directors). A "negative vote" includes against, withhold or abstain votes.



3.21 What is the process and criteria used to determine whether a director is considered an industry expert?

In general, a board member's biography must disclose that they currently or previously served as an executive at a company with the same Global Industry Classification Standard (GICS) industry code as the one they serve on (this may at be the company itself).

3.22 What is the process and criteria used to determine whether a director is considered a financial expert?

In general, a board member's biography must disclose that they have financial or accounting expertise. MSCI ESG Research looks for designations such as CFO, CPA, etc., and also reviews the director's previous and current positions and duties.

3.23 What is the process and criteria used to determine whether a director has risk management experience?

In general, a board's member prior experience must include a specific reference to risk management in the director's published bio. See general criteria below:

- Risk Officer/Manager Public or private company or a division/subsidiary of such firm
- Executive with Risk Management Executive (such as CFO, Managing Director) tasked with specific risk management duties
- Insurance Company CEO
- **Risk Consultant** Principal, executive or partner or consultant in a risk consulting firm or practice
- Public Sector Risk Management
- Risk Academic
- Executive Level Risk Committee Member this must not be a board-level committee, but rather a committee that operationally manages risks at the executive level

Professions Not Acceptable as Sole Consideration:

- CEO or CFO, in general
- Membership on a board-level risk committee or risk subcommittee of another company



- Membership on an advisory risk committee of a profit or non-profit organization
- Senior military positions and senior political positions
- Professorships in business, finance, or economics
- Director described as having risk expertise or who is described as a 'risk consultant'
- Executive-level position in accounting

3.24 What is the process used to determine the director or executive's age?

The director or executive's age is based on the date of birth as per company disclosure. If only the birth year is provided, the default birth date is the first of January. If only the individual's age is disclosed, the document's publication year is used to determine and assign an estimated year of birth.

3.25 Director independence – can you share more information for the criteria used in assessing non-executive director independence? Specifically:

- What are your criteria in assessing the independence of non-executive directors who have been appointed by specific shareholders?
 - Non-executive directors who sit on the board as shareholder appointees are marked as not Independent of other interests (special shareholder representatives). These individuals remain independent of management unless the shareholder being represented holds 30% or more voting rights in the company and the non-executive director has either effective control of or is an executive of that same majority shareholder.
- What are the criteria used in assessing the independence of former executives?
 A "cooling-off" period is not applied to former executives. They remain permanently non-independent, per MSCI ESG Research methodology.
- What are the criteria used for assessing directors as non-independent due to issuer assessment?

This criteria is used for cases when the company classifies the director as non-independent of management's interests but does not disclose a specific reason for such classification.



- How are employee representatives assessed for independence?
 - Employee representatives are assessed as Independent of Management but not Independent of Other Interests. In the assessment of key metrics relating to board and committee independence they are therefore considered to be independent.
- Which key metric apply both independence assessments (ie of management and of other interests?
 - Given the nature of the Nomination Committee, Chairman and Lead Independent Director roles, the associated Key Metrics are assessed using both Independent of Management and Independent of Other Interests criteria.

3.26 Why is our company flagged for "leadership concerns"? What is the issue of concern?

This key metric is flagged when there are concerns that a leader has extraordinary influence over a board. This includes situations where, for example (but this is not an exhaustive list):

- An Executive Chairman serves alongside a CEO,
- The Chairman is a former CEO or CFO,
- The Founder remains on the board but not as Chair or CEO, or
- There are unregistered directors providing leadership direction.

3.27 Do two-tier boards score lower? What if this structure is mandated by local corporate law?

Our methodology does not penalize two-tier boards, which are common in Germany, Austria, Netherlands, Poland and France. Our scoring methodology is explicitly designed to provide a fair comparison between companies regardless of board structure.

3.28 Why is the "Related-Party Transactions" key metric flagged for my company?

The Related-Party Transaction (RPT) Key Metric is assessed using a common framework. This framework was developed by MSCI ESG Research based on a review



of research published by the OECD and with reference to the International Financial Reporting Standards.

Related Parties may include:

- Directors and Officers, and their family members;
- Any entities that control or are under common control with the company, including executives of such entities and members of their families;
- Significant shareholders (10% or more), including members of their families;
 and
- Management companies, managing partners and other entities to whom the management or operations of the company have been delegated.
- Non-wholly owned subsidiaries may be considered Related Parties if the other shareholder in the subsidiary is one of the parties noted in the list above.

Related-party transactions can vary widely by type, reflecting the variety of transactions generally undertaken by companies, and may be either one-off or recurring in nature. Transaction Types may include:

- Revenue;
- Expense;
- Sale or Purchase of Assets;
- Loan to / from company; and
- Loan guarantee.

Any loans to executive directors, other senior executives, company founders or their family members will be regarded as related-party transactions in all cases. Loans to other non-executive directors by companies will be regarded as related-party transactions, except in cases where the company is operating in the financial sector in the normal course of business. Transactions between a company and non-executive director that exceed the thresholds under our MSCI ESG Ratings methodology will result in the director being classified as not Independent of Management and the transactions will be regarded as related-party transactions.



CORPORATE GOVERNANCE QUESTIONS: PAY

3.29 What criteria are used to establish peer groups, and how often are they re-evaluated?

The Pay Peer Groups are utilized in certain key metrics for comparative and benchmarking purposes. These groupings are regenerated every quarter, and companies are assigned to a Pay Peer Group based on three criteria:

- 1. Industry determined based on the company's GICS industry classification;
- 2. **Market Capitalization** based on the size references in the below table, which are updated annually; and

	Developed Markets	Emerging Markets
Large Cap	>=USD 10.901 billion	>=USD 5.45 billion
Mid Cap	>=USD 4.04 billion and <usd 10.901="" billion<="" td=""><td>>=USD 2.02 billion and <usd 5.45="" billion<="" td=""></usd></td></usd>	>=USD 2.02 billion and <usd 5.45="" billion<="" td=""></usd>
Small Cap	>=USD 342 million and <usd 4.04="" billion<="" td=""><td>>=USD 171 million and <usd 2.02="" billion<="" td=""></usd></td></usd>	>=USD 171 million and <usd 2.02="" billion<="" td=""></usd>
Micro Cap	<usd 342="" million<="" td=""><td><usd 171="" million<="" td=""></usd></td></usd>	<usd 171="" million<="" td=""></usd>

- 3. **Peer Market** divides companies into one of three regional peers on the basis of their Home Market designation:
 - · Developed Americas;
 - Other Developed Markets; and
 - Emerging Markets.

3.30 Does the "Severance vesting" key metric include unvested equity awards, still eligible for vesting upon a CEO's termination, that were awarded pursuant to double-trigger termination provisions?

Yes – this key metric is flagged if upon the termination of the CEO's employment there are unvested equity awards which would then become eligible for vesting.



3.31 "Significant votes against pay practices" - what is the required threshold and relevant time period that results in the flagging of this key metric? What is considered "significant"?

This key metric is flagged if the company's pay policies and/or practices received a "negative" or "withheld" shareholder vote equal to or in excess of 10% at the company's most recently reported election. A "negative vote" includes against, withhold or abstain votes.

3.32 Flag for executive pay non-disclosure. We disclose aggregate pay data in our public reporting. Why does the report state that we fail to disclose this?

Per MSCI ESG Research's methodology, we are seeking granular disclosure of individual pay components, including: salary, short-term incentives, long-term incentives, pensions, other miscellaneous benefits such as perquisites and any one-off payments (e.g. retention awards), for the company's CEO, and for each executive member of the board of directors. The reporting of aggregate totals alone does not meet this standard.

3.33 What does "fraudulent" mean under the clawback policy in the ESG Ratings governance assessment/Corporate Governance Theme?

With respect to clawback types, pursuant to MSCI's methodology, "fraudulent" is taken to mean that the clawback policy can only be applied to individuals who were found responsible for the actions that resulted in a material restatement. Performance-linked clawback policies are considered to be stronger, per MSCI's standards because they give the board the discretion needed to recoup awards given to an individual regardless of whether they were personally involved.

3.34 Can you explain the "Pay Linked to Sustainability" key metric?

This key metric is based on a review of the company's variable pay performance metrics for the inclusion of one or more sustainability-linked performance metrics. In general, the analyst team looks for publicly reported evidence of one of the performance measures disclosed in the compensation report for either the annual or long-term incentive plans being a metric that links directly to sustainability performance.



CORPORATE GOVERNANCE QUESTIONS: OWNERSHIP & CONTROL

3.35 We are fully compliant with local laws/requirements in this area and believe our governance systems are in-line with local market expectations. MSCI ESG Research's governance assessment does not appear to reflect this reality and flags us for various practices that we do not feel are relevant or correct.

Our corporate governance assessments are designed to highlight governance risks that investors are potentially exposed to when they invest. Our scoring methodology is more than a simple, "check-the-box" compliance exercise, and is intended to be globally applied, as many large institutional investor portfolios hold large numbers of regionally- and industry-diverse companies. It is intended to identify outliers on various governance risk factors that go beyond company practices alone, and may even fall outside of the company's direct control. For example, this might include:

- Market-specific ownership structure limitations (not something the company can control),
- The quality of local regulations (not something the company can control),
- Peer performance, as part of our pay assessments (not something the company can necessarily control), and
- The track record of individuals on the board (including their performance at other companies).

Please note that the above examples are for illustrative purposes and should not be considered an exhaustive list.

3.36 MSCI governance data appear to be out-of-date or erroneous, particularly on board/director information. What is the process used to update the company's board composition?

MSCI ESG Research may conduct multiple governance data updates throughout the year, including: 1) an annual review which is generally published before the company's annual general meeting; 2) voting result updates that reflect post-AGM director changes (typically updated in the second half of the calendar year); and 3) ad-hoc board updates to reflect board movements that are reported by third-party news sources and company filings, (in the US these would be 8-Ks (Items 5.02 and 5.07)) that are automatically fed to our queue for review.



3.37 Our largest shareholder does not hold more than 50% of the voting rights. Why is there a flag for having a controlling shareholder?

Pursuant to MSCI ESG Research's methodology, the voting rights threshold to be considered a controlling shareholder is 30% or more. There is, however, no scoring deduction for the Controlling Shareholder Key Metric at either level.

4. How to Provide Feedback

4.1 How can I review and submit feedback on my company's data?

You may review and submit feedback on your company's data at any point throughout the year. Once you are logged into MSCI ESG Research's dedicated online Issuer Communications Portal, you can find underlying datapoints located under the MY DATA tab.



You can submit feedback by clicking the pencil icon next to the data fields. This will open the data verification pop-up box, where you can provide input on values, share your comments, and indicate associated public sources.

If you do not yet have an Issuer Communications Portal account, please email ESG Issuer Communications (esgissuercomm@msci.com).

4.2 When will my data be updated once I submit feedback?

The feedback review process follows a standard data review cycle. Any new data or feedback submitted will be reviewed by analysts in accordance with MSCI ESG Research methodology. The turnaround time for review may fluctuate throughout the year depending on the volume of feedback that analysts receive. Please visit the Issuer Communications Portal for the current average estimated review time forfeedback submitted.

Once you have received notification that any accepted comments have been published, please note that some MSCI ESG & Climate assessments rely on calculations and models that update on an independent cycle. Data updates in the Issuer Communications Portal may not immediately result in an update to final assessments. We greatly appreciate your patience as we work through large volumes of data submitted daily.



5. Ongoing Monitoring & Update Cycle

5.1 When will my report be updated?

Companies are monitored on a systematic and ongoing basis, including daily monitoring of controversies and governance events. New information is reflected in reports on a weekly basis and significant changes to scores trigger a full analyst review and re-rating.

Companies also receive an in-depth review, typically annually. There are times when MSCI ESG Research may extend the rating review period beyond twelve months from the prior ESG Rating Action Date, for example:

- To reduce rating volatility following major methodology changes and to allow for more complex analyst reviews,
- To incorporate new issuer feedback,
- To accommodate more complex reviews,
- To align the timing of ratings updated to company reporting cycles.



Appendix 1: MSCI ESG Key Issue Hierarchy

3 Pillars	10 Themes	35 ESG Key Issues	
Environment	Climate Change	Carbon Emissions	Financing Environmental
		Product Carbon Footprint	Impact
			Climate Change Vulnerability
	Natural Capital	Water Stress	Raw Material Sourcing
		Biodiversity & Land Use	
	Pollution &	Toxic Emissions & Waste	Electronic Waste
	Waste	Packaging Material & Waste	
	Environmental	Opportunities in Clean Tech	Opportunities in Renewable
	Opportunities	Opportunities in Green Building	Energy
Social	Human Capital	Labor Management	Human Capital Development
		Health & Safety	Supply Chain Labor Standards
	Product Liability	Product Safety & Quality	Privacy & Data Security
		Chemical Safety	Responsible Investment
		Consumer Financial Protection	Health & Demographic Risk
	Stakeholder	Controversial Sourcing	
	Opposition	Community Relations	
	Social	Access to Communications	Access to Health Care
	Opportunities	Access to Finance	Opportunities in Nutrition & Health
Governance	Corporate	Ownership & Control	Pay
	Governance	Board	Accounting
	Corporate	Business Ethics	
	Behavior	Tax Transparency	



Appendix 2: Corporate Governance Key Metrics Definitions

Key Issue: Ownership & Control - Key Metrics

Key Issue	Category	Key Metric	Definition	Scope
Ownership & Control	Ownership Structure	Controlling Shareholder	Does any shareholder or shareholder bloc control more than 30% of the voting shares, or is able to elect more than 50% of the company's board? Flagged if yes. Where the Governance Reference Entity is not an equity issuer, this evaluation is based on the ultimate owner.	All issuers
Ownership & Control	Ownership Structure	Controlling Shareholder Concerns	Does the company's ownership structure or governance arrangements indicate special concerns for minority public shareholders? Flagged if yes. This can be triggered by the presence of one or more criteria, including where: • Any of the following Key Metrics (KM) are also flagged: • No Independent Directors (KM_009); Leadership Concerns (KM 011); Undersized Board (KM 035); Cross Shareholdings (KM_066); or Poison Pill (KM_073) • Or any of the following apply: • The issuer has issued Golden Shares; • The issuer is controlled via a stock pyramid; • The issuer incorporated as a Partnership Limited by Shares; or • The largest shareholder holds more than 75% of the total voting rights.	All issuers
Ownership & Control	Ownership Structure	Dispersed Ownership Concerns	Is the company so widely held that there are no principal shareholders or other large bloc holders? Flagged if yes. This test eliminates family or founder firms, companies with a 10% or greater principal shareholder, and companies where the aggregate 5%+ holdings exceed 30%. This metric is intended to capture companies where there is a disconnect between ownership and management. In the absence of the constraining influence of informed and involved bloc holders, there is a greater risk of the CEO and board asserting a degree of power and authority more commonly associated with controlled companies.	All issuers



Key Issue	Category	Key Metric	Definition	Scope
Ownership & Control	Ownership Structure	Cross- Shareholdings	Is the company involved in a series of cross-shareholdings with other (related or unrelated) companies? Flagged if yes. This metric is intended to capture cross-shareholdings intended for non-investment purposes. Cross-shareholdings for the purpose of this Key Metric include direct, indirect (via subsidiary companies), circular or more complex cross-shareholding networks.	All issuers
Ownership & Control	Ownership Structure	Tracking Stock	Is the company being traded as a tracking stock or similar trading-based entity? Flagged if yes. Tracking stocks are treated as an indicator of potential governance weakness.	All issuers
Ownership & Control	Ownership Structure	Variable Interest Entities	Does at least 5% of the Group's revenues come from VIEs where the company has no/minimal voting stake? Flagged if yes. A variable interest entity (VIE) is a special purpose vehicle in which the issuer holds a controlling interest in an operating company that is not based on a majority of the voting rights. Via structured contracts, the issuer is typically the primary beneficiary of the VIE.	All issuers
Ownership & Control	One Share, One Vote	Multiple Equity Classes with Different Voting Rights	Has the company issued more than one class of equity shares and do these classes carry unequal voting rights? Flagged if yes. The inequality in the voting rights may be manifested via different votes per share, different votes per unit of nominal value or through the ability to vote only on certain matters, or on the election of certain directors, or grant special rights (such as the exclusive right of nomination of directors). When a share class termed as "preference," "preferred" or similar, is classified in the annual accounts under accounting standards as an equity security rather than a liability, then it will be considered as an equity class for the purposes of this metric. Share classes that do not carry special rights but have unequal voting rights may not be flagged if the number issued is not material.	All issuers
Ownership & Control	One Share One Vote	Single Equity Class with Different Voting Rights	Does the capital structure include a single share class where the voting rights vary based on the duration of ownership (or extra voting rights are granted via "loyalty shares")? Flagged if yes. In some literature these may also be referred to as tenured voting shares.	All issuers



Key Issue	Category	Key Metric	Definition	Scope
Ownership & Control	One Share, One Vote	Voting Rights Limits Shares Held	Are voting rights capped at a certain percentage, no matter how many shares the investor owns? Flagged if yes. This may refer to either an "ownership ceiling" or a "voting rights ceiling," in which ownership and/or voting rights limits are applied to some or all shareholders. This metric is derived from a company's corporate charter and bylaws, or on the basis of applicable corporate regulation.	All issuers
Ownership & Control	One Share, One Vote	Voting Rights Limits Residency	Are voting rights different for foreign or non-resident shareholders? Flagged if yes. This provision sets limits on the ability of foreign or non-resident parties to vote on corporate matters, regardless of the number or type of shares held, and includes cases in which foreign shareholders are prohibited from voting. This may refer either to an aggregate limit on shares or voting rights held by shareholders of a stated nationality or to a limit on holdings of one shareholder based on that shareholder's nationality. This metric is derived from a company's corporate charter and	All issuers
Ownership & Control	One Share, One Vote	Government Intervention Concerns	bylaws, or on the basis of applicable corporate regulation. Do the company's capital and ownership structures include a "golden shares" provision, are there an equivalent provision in national or state laws, or does the government have the right to nominate Government Representatives to the board? Flagged if yes. A "golden shares" provision allows a single large shareholder, usually a national government, to override all other shareholder voting rights on certain decisions.	All issuers
Ownership & Control	Control Mechanisms	Poison Pill	Has the company adopted a takeover defense such as a poison pill, shareholder rights plan, or equivalent provision? Flagged if yes. A takeover defense may shield management and the board from accountability (board entrenchment). Takeover defenses may include a formal shareholder's rights plan, poison pill, protective preference shares or equivalent provision.	All issuers
Ownership & Control	Shareholder Rights	Bylaws Amendments	Does the board have the unilateral right to amend the company's bylaws / Articles of Association without shareholder approval? Flagged if yes. Most U.S. companies grant the board unilateral control of the bylaws, so most U.S. companies are flagged for this metric, but in other regions this remains a helpful indicator of governance strength. This metric is derived from a company's corporate	Equity issuers



Key Issue	Category	Key Metric	Definition	Scope
			charter and bylaws, or on the basis of applicable corporate regulation.	
Ownership & Control	Shareholder Rights	Shareholder Rights to Convene Meeting	Do shareholders lack the right to requisition an extraordinary general meeting (EGM) or does the threshold required to request an EGM exceed 10% of the voting rights? Flagged if yes. Some companies may apply a different threshold to append a resolution to the agenda of an existing meeting — see Shareholder Rights Concerns.	Equity issuers
Ownership & Control	Shareholder Rights	Shareholder Rights Concerns	Are shareholders limited in their ability to make changes at the company due to the nature of provisions in the governing documents? Flagged if yes. Does a change to the governing documents require a vote in favor from more than 67% of the total capital or from more than 75% of the votes cast? Are shareholders both unable to act by written consent in a majority vote AND where the threshold required to request inclusion of a shareholder proposal at the annual general meeting (AGM) exceeds 1% (or is not permitted)?	Equity issuers
Ownership & Control	Shareholder Rights	Say-on-Pay Policy	Has the company failed to implement regular Say-on-Pay votes? Flagged if yes. Shareholders should be granted a vote on either the policies themselves, the amounts paid pursuant to these policies, or on the report of the pay committee that sets out these items, i.e. this should be a broad-based vote on policy or total pay, and not just a vote on the policy or total amount of one component of pay. The scope of the "say-on-pay" vote must include any executive directors on the board of directors, or the most senior executive, if there is no executive director on the board. The vote may be in respect of all the executive director individually. Votes should be held on a regular basis, at intervals of no more than three years. The Key Metric will not be flagged if there are no executives (e.g. for investment trusts).	Equity issuers
Ownership & Control	Shareholder Rights	Confidential Voting	Has the company failed to implement confidential voting, barring reasonable exceptions? Flagged if yes. Confidential voting is intended to protect the anonymity of shareholders who wish to vote against management, or against a particular director, but who may be concerned about the possibility of redress. This metric is derived from a company's corporate charter and bylaws, or on the basis of applicable corporate regulation.	Equity issuers



Key Issue	Category	Key Metric	Definition	Scope
			For the U.S. and Canada, this metric is flagged unless the required evidence to confirm confidential voting is in place. For other markets, this metric is only flagged if specific evidence is identified to indicate the absence of confidential voting.	
Ownership & Control	Director Elections	Proxy Access	Does the company not allow qualified shareholders to nominate directors for election at the annual meeting, such nominees as to be included in the meeting agenda circulated by the company to its shareholders? Flagged if yes. Proxy access is a measure of the shareholder's ability to influence the composition of the company's board. This metric is derived from a company's corporate charter and bylaws, or on the basis of applicable corporate regulation.	Equity issuers
Ownership & Control	Director Elections	Annual Director Elections	Do any shareholder elected directors stand for re-election at intervals greater than one year? Flagged if yes. This metric captures both classified boards, where director re-election is staggered, and boards where all directors stand simultaneously for re-election albeit less often than annually. Boards undergoing declassification over an extended period are treated as classified until this process has been completed – i.e. until all of the board members are being re-elected annually. The metric does not refer to employee-appointed directors, being specifically focused on shareholder-elected directors.	Equity issuers
Ownership & Control	Director Elections	Strong Classified Board Combination	Does the company have a classified or staggered board in combination with other limitations on shareholder rights that further limit shareholders ability to affect the make-up of the board? Flagged if yes. A company has a strong classified board combination if, in addition to having a Classified Board, any of the following are true: Director Removal for Cause Only is Yes, and Shareholder Can Fill Board Vacancies is No and the Bylaw Vote Percent is = 0% or > 51%; Director Removal for Cause Only is Yes, and Shareholder Can Fill Board Vacancies is No and the Effective Classified Board is Yes; Director Removal without Cause Vote % > 51%, and Shareholder Can Fill Board Vacancies is No and Bylaw Vote Percent is = 0% or > 51%; and Director Removal Without Cause Vote % > 51%, and Shareholder Can Fill Board Vacancies is No, and Effective Classified Board is yes.	Equity issuers



Key Issue	Category	Key Metric	Definition	Scope
Ownership & Control	Director Elections	Majority Voting	Has the company failed to use or adopted binding majority voting in the election of directors (with immediate resignation, if the director does not receive a majority of the votes cast)? Flagged if yes. MSCI ESG Research uses a strict majority standard for this metric, flagging plurality, plurality plus resignation and majority plus resignation standards. Where a director fails to achieve a majority of the votes cast, this standard requires the director to immediately depart (unless the company would have below the legal minimum number, in which case they remain only briefly pending a new appointment). Implementation of majority voting is a measure of the shareholder's ability to influence the	Equity issuers
			composition of the board.	
			Does the company with a controlling shareholder use a plurality vote standard for director elections, yet does not allow cumulative voting (whether as the default election standard or at the request of shareholders)?	
			Flagged if yes.	
Ownership & Control	Director Elections	Cumulative Voting	A method of election of the board of directors whereby a stockholder may cast as many votes for directors as he or she has shares of stock, multiplied by the number of directors to be elected. The purpose of cumulative voting is to facilitate the representation of minority stockholders on the board. The stockholder may cast all of his or her votes for one or more, but not all, of the directors on the ballot, which therefore promotes representation of small shareholders.	Equity issuers
			Do shareholders lack the right to remove individual directors without cause?	
		Director	Flagged if yes.	
Ownership & Control	Director Elections	Removal Without Cause	If director removal without cause is permitted, a bidder that is hostile to current management may seek to remove existing directors and replace them with the bidder's nominees.	Equity issuers
			Where there is no evidence of this right, from either national or stock exchange regulation or from the company's documents, the Key Metric will be flagged.	
			Does the company have a constituency provision or is it subject to constituency protection under applicable law?	
Ownership	Takeover		Flagged if yes.	Equity
& Control	Provisions	Provision	Constituency provisions allow a board to take into account interests other than those of shareholders in making corporate decisions, including decisions about changes of control. Typical	issuers



Key Issue	Category	Key Metric	Definition	Scope
·			other constituencies would include employees, communities, customers, suppliers and the environment.	
			The Key Metric will be flagged where there is explicit evidence of this provision from either national or stock exchange regulation or from the company's documents.	
			Does the company have a business combination provision in place or is it subject to business combination protection under applicable law?	
Ownership & Control	Takeover Provisions	Business Combination Provision	Flagged if yes. A business combination provision requires that a company not engage in a transaction with a shareholder holding a certain percentage (usually dubbed an "Interested shareholder") for a period of time after the shareholder went over the threshold, or that such a transaction be approved by a higher-than-usual percentage of shares. A different variation of a "business combination" may also list a higher-than-usual percentage of shares for approving a merger but not list a time period during which a merger would be prohibited.	Equity issuers
Ownership & Control	Takeover Provisions		Does the company not have a fair price provision (with a mandatory bid requirement which does not exceed 33.3%) in place or is it not subject to fair price protection under applicable law? Flagged if yes.	
		Fair Bid Treatment Provisions	These terms generally involve all holders being entitled to receive the same price for their shares, the price being within some range of the average market price over some period of time prior to the offer, the offer remaining open for a minimum amount of time, and similar protections. In the U.S., this is generally presented as an exception to the business combination provision's prohibition or higher vote requirement that applies when an acquisition offer contains certain terms designed to ensure fairness and eliminate the possibility that shareholders will feel coerced to agree to the offer.	Equity issuers



Key Issue: Board - Key Metrics

Key Issue	Category	Key Metric	Definition	Scope
Board	Board Leadership	Independent Chair	Is the non-executive chair classified as not independent of management or not independent of other interests (links to employees, government or major owners), based on MSCI ESG Research criteria?	All issuers
			Flagged if yes. This metric refers to the Board of Directors or (in a two-tier board structure) to the Supervisory Board.	
Board	Board Leadership	Combined CEO/Chair	Does the company have a combined CEO/Chair? Flagged if yes. While the practice of combining the CEO and Chairman positions on the Board of Directors is common enough to minimize its significance as a standalone metric, when combined with other key indicators this practice may be an indicator of potential governance weakness.	All issuers
Board	Board Leadership	Leadership Concerns	Are there concerns that there is a leader with excessive influence, including where there is an Executive Chairman serving alongside a CEO, where the Chairman is a former CEO or CFO, where a Founder or Co-Founder remains on the Board but not as Chair or CEO, or where there are unregistered directors providing leadership direction? Flagged if yes.	All issuers
Board	Board Leadership	Chair Not Independent & No Independent Lead Director	For companies with a non-independent chair, has the company failed to designate an individually named non-executive lead director or independent deputy chairman who is classified as both independent of management and independent of other interests (links to employees, Government or major owners), based on MSCI ESG Research criteria? Flagged if yes. This metric refers to the Board of Directors or (in a two-tier board structure) to the Supervisory Board. For purposes of evaluating this metric, MSCI ESG Research excludes any lead directors who have not been individually designated as such by the company. This standard explicitly excludes lead director assignments based on rotating committee chairperson assignments or similar practices that may weaken the role and effectively counter its intended purpose.	All issuers



Key Issue	Category	Key Metric	Definition	Scope
Board	Board Independe nce	Board Majority Independent of Management	Are less than a majority of directors independent of management, as defined by MSCI ESG Research? Flagged if yes. This metric flags issuers when less than 51% of the board is independent of management. For issuers with a two-tier board structure, this Key Metric assesses the supervisory board.	All issuers
Board	Board Independe nce	Board Majority Independent of Other Interest	Are less than a majority of directors independent of other interests, as defined by MSCI ESG Research? Flagged if yes. This metric assesses what percentage of directors are affiliated with interests (other than those of management) that may diverge from the interests of minority investors. Issuers are flagged when less than 51% of the board is independent of other interests. For issuers with a two-tier board structure, this Key Metric assesses the supervisory board.	All issuers
Board	Board Independe nce	Executives on Board	Does 30% or more of the Board of Directors comprise executive directors or does the Management Board include eight or more executive directors? Flagged if yes. All board member bios are reviewed to determine current titles and positions.	All issuers
Board	Board Independe nce	No Independent Directors	Is the board composed entirely of directors who do not meet the MSCI ESG Research criteria for independence from management? Flagged if yes. This metric tests for those extreme cases where there is not a single member of the Board of Directors or Supervisory board who can be considered fully independent of management.	All issuers
Board	Board Independe nce	Related-Party Transactions	Has there been any disclosed related-party transactions (RPTs) in respect of either of the two most recently reported financial years? Flagged if yes.	All issuers
Board	Board Effectivene ss	Flagged Directors on Board	Are any of the board members Flagged Directors, as defined by MSCI ESG Research? Flagged if yes. For issuers with two-tier board structures, members of either the Supervisory Board or the Management Board may be flagged.	All issuers



Key Issue	Category	Key Metric	Definition	Scope
Board	Board Effectivene ss	Overboarded Non-Exec Directors	Do any of the company's non- executive board members serve on the boards of three or more additional issuers (i.e. four total boards, including the rated company) in MSCI ESG Research's corporate governance research universe (whether included as an equity or debt issuer)? Flagged if yes.	All issuers
			Board membership counts reference the Board of Directors or (in a two-tier board structure) to the Supervisory Board and the Management Board.	
	Board	Overboarded Exec Directors	Do any of the company's executive board members serve on the boards of two or more additional issuers (i.e. three total boards, including the rated company) in MSCI ESG Research's corporate governance research universe (whether included as an equity or debt issuer)?	All issuers
Board	Effectivene ss		Flagged if yes.	
	SS		This is of particular significance in the case of the company's CEO. Board membership counts reference the Board of Directors or (in a two-tier board structure) to the Supervisory Board and the Management Board.	
	Board Effectivene ss	Significant Votes Against Directors	Are there one or more directors on the board who received a negative or withheld shareholder vote in excess of 10% in the most recently reported election?	All issuers
			Flagged if yes.	
Board			This metric refers to the Board of Directors or (in a two-tier board structure) to the Supervisory Board and the Management Board.	
			Even a negative vote of 5% indicates an unusually high vote against a particular individual director at most companies. This metric is triggered by a negative vote of over 10% against any directors in the most recently reported election (or in certain markets on the discharge of the directors). A "negative vote" includes any of against, withhold or abstain votes.	
Board	Board Effectivene ss	fectivene	Does the total number of directors on the board of directors or supervisory board exceed local or regional standards?	All issuers
			Flagged if yes.	
			This is currently set to flag at 20 directors or more for most countries, and refers to either the board of directors or supervisory board.	



Key Issue	Category	Key Metric	Definition	Scope
Board	Board Effectivene ss	Undersized Board	Are there four or fewer directors on the board of directors or supervisory board?	
			Flagged if yes.	
			Boards comprising so few individuals may lack the diversity of view and experience needed to provide effective oversight over most public companies, particularly when it comes to assigning resources to the board's standing committees.	All issuers
			This metric refers to either the board of directors or supervisory board.	
		Board Attendance Failures	Did any members of the board fail to attend at least 75% of all board and committee meetings held during the last reported period?	
Doord	Board Effectivene		Flagged if yes.	All issuers
Board	ss		This metric refers to the Board of Directors or (in a two-tier board structure) to the Supervisory Board and the Management Board.	
			Excessive board attendance failures have been linked to other, less visible board problems or weaknesses.	
	Board Skills & Diversity		Does the percentage of long-tenured, aging directors suggest a problem with board entrenchment?	All
			Flagged if yes.	
			This metric is based on an assessment of multiple factors, including director age and tenure in the following combinations:	
Board			More than 35% of the board has a tenure of 15 years or greater;	
			More than 22% of the board has a tenure of 15 years or greater and more than 15% of the directors are aged 70 or over;	
			There are more than four directors who have a tenure of 15 years or greater; or	
			If there are more than four directors who are aged 70 or over.	
			This metric extends to the Board of Directors and Supervisory Board.	
			The strength of this metric as an indicator of potential governance problems is greatly increased at companies whose recent performance has consistently lagged their peers.	



Key Issue	Category	Key Metric	Definition	Scope
Board	Board Skills & Diversity	CEOs on Board	Is more than 30% of the board composed of currently active corporate CEOs from other companies?	
			Flagged if yes.	
			This metric extends to the Board of Directors and Supervisory Board.	All issuers
			To be included in this category the individual must be a currently active CEO at another publicly traded corporation; the CEO of the company being rated is excluded. Based on information contained in each individual's bio, or his or her designation as a current company CEO in the MSCI director database.	
			Does the composition of the board fail to include any female directors?	
Board	Board Skills		Flagged if yes.	All issuers
	& Diversity		This metric extends to the Board of Directors and Supervisory Board.	issuers
	Board Skills & Diversity	Not 30% Female Directors	Does the composition of the board fail to include at least 30% female directors?	
Board			Flagged if yes.	All issuers
			This metric extends to the Board of Directors and Supervisory Board.	
	Board Skills & Diversity	Management	Does the board lack at least one non-executive member of the board who has general expertise in risk management, based on	
Board			MSCI's ESG Ratings standards?	All issuers
			Flagged if yes. This metric extends to the Board of Directors and Supervisory	
			Board.	
Board	Audit Oversight	Audit Board / Committee Independenc	Has the company failed to establish an audit committee (or audit board) comprising only directors who are independent of management based on MSCI ESG Research's criteria?	All issuers
		е	Flagged if yes.	
Board	Audit Oversight	Executives on Audit Board / Committee	Are there company executives serving on the Audit Committee or Audit Board?	All issuers
			Flagged if yes.	1334613
Board	Audit Oversight	Audit Committee Financial Expert	Does the audit committee lack at least one non-executive member with general expertise in accounting or financial management, based on the MSCI's ESG Ratings criteria? Flagged if yes.	All issuers



Key Issue	Category	Key Metric	Definition	Scope
Board	Audit Oversight	Audit Committee Industry Expert	Does the audit committee lack at least one non-executive member who has substantial industry knowledge, based on the MSCI's ESG Ratings criteria? Flagged if yes.	All issuers
Board	Audit Oversight	Overboarded Audit Committee Members	Do any of the independent members of the audit committee serve on the boards of three or more additional companies (i.e. four total boards, including the rated company) in MSCI ESG Research's corporate governance research universe (whether included as an equity or debt issuer)? Or do any of the non-independent members of the audit committee serve on the boards of two or more additional companies? Flagged if yes. This metric further emphasizes the link between overboarding and board effectiveness by testing for its presence on this committee.	All issuers
Board	Pay Oversight	Pay Committee Independenc e	Where the company has established a pay committee, are there directors serving on the committee who are not independent of management based on MSCI ESG Research's criteria? Flagged if yes.	All issuers
Board	Pay Oversight	Executives on Pay Committee	Are there company executives serving on the pay committee? Flagged if yes. In addition to evaluating the independence of its non-executive members, MSCI's ESG Ratings scoring model also takes into consideration the presence of current company executives on this standing committee.	All issuers
Board	Pay Oversight	No Pay Committee & Execs on Board	Does the company lack a standing pay committee, and are current company executives serving on its board? Flagged if yes. This metric is flagged for boards that lack a formally named pay committee yet include among its members one or more current company executives, including the CEO.	All issuers
Board	Pay Oversight	Pay Committee Concerns	Does the composition of the pay committee raise concerns in relation to the presence of active CEOs on the committee or in relation to the past record of the pay committee chair? Flagged if yes. This metric is triggered by the majority of pay committee or the committee chair being active CEOs, where the pay committee chair also chairs other pay committees and the latest annual sayon-pay vote was defeated, or where the pay committee chair is a former listed company CEO and during his CEO tenure the say-on-pay vote was defeated.	All issuers



Key Issue	Category	Key Metric	Definition	Scope
Board	Nomination Process Oversight	No Nomination Committee	Does the company lack a standing nomination committee? Flagged if yes. This metric flags issuers that have not disclosed a formal nomination committee. A committee with the responsibility to nominate directors for election to the board will generally be considered a nomination committee, regardless of its name or other roles.	All issuers
Board	Nomination Process Oversight	Nomination Committee Chair Independenc e	Is the nomination committee chair not independent of management or other interests, as defined by MSCI ESG Research? Flagged if yes. We consider it a best practice for key committees to be led by members who are independent of management, and, in some markets, nomination committees may include a high proportion of stakeholder representatives whose interests may diverge from those of minority investors. Therefore, this metric assesses the committee chair's independence from both management and other interests. This metric is not evaluated for companies that lack a nomination committee.	All issuers
Board	Nomination Process Oversight	Nomination Committee Independenc e	Are less than a majority of nomination committee members independent of management and other interests, as defined by MSCI ESG Research? Flagged if yes. We consider it a best practice for key committees to be independent of management, and, in some markets, nomination committees may include a high proportion of stakeholder representatives whose interests may diverge from those of minority investors. Therefore, this metric assesses what percentage of the committee is independent of both management and other interests. This metric is not evaluated for companies that lack a nomination committee.	All issuers
Board	Strategic Oversight	Bankruptcy or Liquidation	Is the company, or a material subsidiary, currently in receivership, under bankruptcy protection, or facing liquidation? Flagged if yes. The flag will be removed once the case is assessed as concluded. This Key Metric focuses on negative credit events including Bankruptcy Protection, Administration, Receivership, Curatorship, and Liquidation.	All issuers



Key Issue	Category	Key Metric	Definition	Scope
			Has the company, or a material subsidiary, recently breached the terms of its debt covenants, had a test of its debt covenant terms deferred or waived, or been reported to be in danger of breaching its debt covenants?	
Board	Strategic	Debt Covenant	Flagged if yes. The flag will be removed once the case is assessed as concluded.	All
	Oversight	Concerns	This Key Metric focuses on negative credit events including failure to repay (or defer paying) capital or interest on the debt, breaching terms (or waiving or deferring the testing) of the debt covenants such as exceeding borrowing limits or breaches of technical provisions.	
			Have concerns been identified by the board or been reported in the press in relation to the going-concern assumption, or is there other evidence that the company, or a material subsidiary, may be facing financing difficulties?	
Board	Strategic Oversight	Financing Difficulties	Flagged if yes. The flag will be removed once the case is assessed as concluded.	
			This Key Metric seeks to identify where there is a risk of a negative credit event. A successful outcome such as an equity raising or renegotiated credit terms may resolve this concern, and forms part of the severity assessment criteria.	
			Have concerns been raised as to the treatment of security holders in relation to the raising and/or return of capital?	
	Charlanda	Capital	Flagged if yes. The duration of the flag is dependent on the severity assessment.	
Board	Strategic Oversight	Management Concerns	Circumstances which may be flagged include where investors face high potential equity dilution through the new issue of shares, where there has been unfair treatment of existing investors in capital raisings, or where there are concerns as to share buyback activity.	
Board	Strategic Oversight	Securities Violations	Has the company faced allegations that investors have not been given access to certain basic facts about the company, whether in the process of issuing new securities or following issuance? Or has the company faced substantive allegations of breaches of investor protection requirements (including in relation to offers it makes for third parties)?	
			Flagged if yes. The duration of the flag is dependent on the severity assessment.	
			Note: Items which relate specifically to Accounting and Audit issues are covered in the Accounting Key Metrics.	



Key Issue	Category	Key Metric	Definition	Scope
Board	Strategic Oversight	Threat of Delisting	Is the issuer currently in breach of its continuing obligations that apply to the listing of its securities, which may threaten the continued listing or trading of those securities? Flagged if yes. The flag will be removed once the case is assessed as concluded.	All issuers
Board	Strategic Oversight	Executive Misconduct	Has a current or recent member of the board or a senior executive of the company (and while serving at this company) allegedly failed to act with honesty and integrity, engaged in actions contrary to the interests of the company and its shareholders, breached trust or confidence, engaged in criminal actions or engaged in actions that caused damage to the company's reputation? Flagged if yes. The duration of the flag is dependent on the severity assessment. This metric refers to current or former members of the board of directors, management board (in a two-tier structure) and executive committee.	All issuers
Board	Strategic Oversight	Other High- Impact Governance Events	Has the company faced situations that may distract the board from focusing on business operations and strategic matters; have major questions been raised as to the quality of past board decisions; or is there evidence of governance failures at the company? Flagged if yes. The duration of the flag is dependent on the severity assessment.	All issuers



Key Issue: Pay - Key Metrics

Key Issue	Category	Key Metric	Definition	Scope
			Does the CEO hold shares with a value below 5x salary and has the company failed to adopt either effective stock ownership guidelines or an equity retention policy for the CEO?	Equity issuers All issuers All issuers
	Pay	CEO Equity	Flagged if yes.	Equity
Pay	Performance Alignment	Policy	This metric is triggered where there is no evidence of a shareholding policy or guideline for the CEO requiring them to build and maintain a holding of at least 5x salary or an equity retention policy requiring at least 50% of vested equity incentives to be retained until the 5x salary level is achieved.	issuers
Pay	Pay Performance	CEO Equity Changes	Has the number of shares held by the CEO (after adjustment for any corporate actions) decreased year over year by 10% or more?	
	Alignment	changes	Flagged if yes.	1330013
			This metric excludes CEOs with less than two years' tenure.	
	Pay	Long-Term	Does the CEO's equity pay fail to reflect the company's total shareholder return (TSR) performance over the last three and five years?	
Pay	Performance	Pay	Flagged if yes.	
	Alignment	Performance	This is flagged if any vested stock and option gains reported for the company's CEO are greater than zero during a year when the company is showing negative 3-yr and 5-yr TSR.	1334613
		Long-Term	Does the CEO's equity pay fail to reflect the company's TSR performance over the last three and five years relative to their Pay Peer Group?	
Pay	Pay Performance	Pay	Flagged if yes.	All
. ,	Alignment	Performance Versus Peers	This is flagged if any vested stock and option gains reported for the company's CEO are greater than zero during a year when the company's 3-yr and 5-yr TSR fall below the median for their Pay Peer Group.	issuers



Key Issue	Category	Key Metric	Definition	Scope
			Did the CEO's annual incentives fail to rise or fall in line with annual performance for the last reported period?	
			Flagged if yes.	
			Did the CEO's annual incentives fail to rise or fall in line with annual performance for the last reported period? Flagged if yes. The four test metrics used are Net Income, Basic Normalized earnings per share (EPS), Total Revenue and Total Assets. This metric is flagged if: • CEO's reported total short-term incentive is greater than zero and two or more of the four test metrics listed above have decreased year-on-year, OR: • Total short-term incentive increased and only one metric increased year-on-year OR; • Total short-term incentive increased year-on-year and all four metrics decrease OR; • Total short-term incentive remains the same (for non-zero amounts) and two or three metrics decreased year-on-year. "Total short-term incentive" for the purpose of this Key Metric includes any Bonus (in the US including "Non-Equity Incentive Compensation"), whether delivered in the form of cash, shares, shares subject to a holding period prior to release, bonus waived into pension or other form of delivery. Has the company, if designated as having either a high environmental or social impact, failed to incorporate links to sustainability performance in its current incentive pay policies? Flagged if yes. This metric is based entirely on the company's own reporting, and is strictly focused on the specific inclusion or not of such metrics in the determination of variable pay components and does not take into consideration their effectiveness. High Environmental Impact: If any of the following ESG Ratings Key Issues carries more than a 5% weight: Carbon Emissions, Water Stress, Toxic Emissions & Waste, Product Carbon Footprint, Raw Material Sourcing, Packaging Material & Waste, Electronic Waste, Biodiversity & Land Use, Energy Efficiency. High Social Impact: If any of the following ESG Ratings Key Issues carries more than a 5% weight: Labor Management, Health & Safety, Product Safety & Quality, Supply Chain Labor	
			zero and two or more of the four test metrics listed above	
Pay	Pay Performance	Short-Term Pay	1	All issuers
	Alignment	Performance	, ,	
			amounts) and two or three metrics decreased year-on-	
			"Total short-term incentive" for the purpose of this Key Metric includes any Bonus (in the US including "Non-Equity Incentive Compensation"), whether delivered in the form of cash, shares, shares subject to a holding period prior to release, bonus waived into pension or other form of delivery.	
			Has the company, if designated as having either a high environmental or social impact, failed to incorporate links to sustainability performance in its current incentive pay policies?	
			Flagged if yes.	
	Pay		This metric is based entirely on the company's own reporting, and is strictly focused on the specific inclusion or not of such metrics in the determination of variable pay components and does not take into consideration their effectiveness.	
Pay	Performance Alignment	Pay Linked to Sustainability	High Environmental Impact: If any of the following ESG Ratings Key Issues carries more than a 5% weight: Carbon Emissions, Water Stress, Toxic Emissions & Waste, Product Carbon Footprint, Raw Material Sourcing, Packaging Material & Waste, Electronic Waste, Biodiversity & Land Use, Energy Efficiency.	All issuers
			High Social Impact: If any of the following ESG Ratings Key Issues carries more than a 5% weight: Labor Management, Health & Safety, Product Safety & Quality, Supply Chain Labor Standards, Human Capital Development.	



Key Issue	Category	Key Metric	Definition	Scope		
Pay	Pay Performance	Clawbacks & Malus	Where the company offers variable or incentive pay, has the company failed to adopt a clawback policy, applicable to both the annual and long-term incentives, that would recoup incentive pay based on accounts that were restated at a later date? Flagged if yes.	All issuers		
	Alignment		The absence of a formal clawback policy may weaken the board's legal standing in cases where senior executives have been granted incentive awards on the basis of fraudulent or simply erroneous data.			
			Has there been public criticism from stakeholders of golden hellos provided by the company to its CEO or other senior executives?			
			Flagged if yes. The duration of the flag is dependent on the severity assessment.			
Pay	Pay Performance Alignment	Golden Hellos	severity assessment. A golden hello is considered to be any first-year pay award for external hires in excess of one year's total remuneration in normal circumstances, regardless of form. The scope of this key metric extends to any CEO; any member	All issuers		
	Aligilileit		The scope of this key metric extends to any CEO; any member of the Management Board in a two-tier board structure; any executive member of the Board of Directors in a unitary board structure or where a board of directors/board of auditors structure is in place; or any of the top 5 executives (US – named executive officers).			
Pay	Pay Performance Alignment	Pay Controversy	Have the company's pay policies or practices attracted adverse public comment from stakeholders (including shareholders, government, regulators, etc.)? Flagged if yes. The duration of the flag is dependent on the severity assessment.	All issuers		
	Pay	Significant	For the most recently reported period, did the company receive a negative vote in excess of 10% on its pay policies and practices?			
Pay	Performance	Vote Against	Flagged if yes.	All issuers		
	Alignment	Pay Practices	This metric is intended to measure shareholder dissatisfaction with the company's executive pay practices. A "negative vote" includes any of against, withhold or abstain votes.			



Key Issue	Category	Key Metric	Definition	Scope
			Has the company failed to disclose specific pay totals for its top executives, including the CEO?	
			Flagged if yes.	
			This is the most basic test in this area, and as such, carries considerable weight when invoked, as it must serve in the place of several of the other metrics normally applied in this area.	
Pay	Pay Figures	Executive Pay Disclosure	Disclosure must include, at minimum, pay for all executive members of the Board of Directors (or Management Board for companies with a two-tier board structure) on an individualized basis or in cases where there are no executive members, the CEO. The individualized disclosure should include separate information on the amount of each of the following (where such a component is provided): Salary, Short-term Incentives, Long-term Incentives, Pensions, Benefits, one-off payments (such as recruitment or retention awards).	All issuers
Pay	Pay Figures	CEO Pay Total Realized	Does the most recently reported total realized CEO pay figure fall into an extreme range relative to the company's peers? Flagged if yes. Flagged if CEO Total Actual Pay falls within the top decile of CEO Realized Pay values for the company's pay peers. Because companies file their proxies at different times throughout the year, a company could see this metric change due to changes in reported figures for its peers.	All issuers
			Does the most recently reported total awarded CEO pay figure fall into an extreme range relative to the company's peers?	
Pay	Pay Pay Figures Total	CEO Pay Total Awarded	Flagged if yes. Flagged if CEO Total Awarded Pay falls within the top decile of CEO Total Awarded Pay values for the company's pay peers. Because companies file their proxies at different times throughout the year, a company could see this metric change due to changes in reported figures for its peers.	All issuers
Pay			Does the most recently reported Total Fixed CEO Pay figure fall into an extreme range relative to the company's peers?	All issuers
	Pay Figures	CEO Pay Total Fixed	Flagged if yes. Flagged if CEO Total Fixed Pay falls within the top decile of CEO Total Fixed Pay values for the company's pay peers. Because companies file their proxies at different times throughout the year, a company could see this metric change due to changes in reported figures for its peers.	



Key Issue	Category	Key Metric	Definition	Scope
Pay	Pay Figures	CEO Pay Perks & Other Pay	Does the most recently reported CEO perquisites and other pay figure exceed the stated MSCI ESG Research thresholds? Flagged if yes. Flagged if the perks reported exceed: • USD 200k for companies with market cap exceeding USD 100 billion • USD 150k for companies with market cap between USD 10 billion & 100 billion • USD 120k for companies with market cap between USD 4 billion & 10 billion • USD 90k for companies with market cap between USD 340 million & 4 billion • USD 75k for companies with market cap below USD 340 million	All issuers
Pay	Pay Figures	CEO Pay NQDC	Is the pension contribution rate (defined contribution amount (CEO NQDC) divided by salary) made by the company on behalf of the CEO excessive relative to peers? Flagged if yes. Flagged if the CEO's pension contribution rate falls within the top decile of all such values for the company's pay peer group. Because companies file their proxies at different times throughout the year, a company could see this metric change due to changes in reported figures for its peers.	All issuers
Pay	Pay Figures	CEO Pay Pension	Is the most recently reported CEO accumulated pension figure (divided by the number of years of pensionable service) excessive relative to peers? Flagged if yes. Flagged if the CEO's (total accumulated pension/years served) figure falls within the top decile of all such values for the company's pay peer group. Because companies file their proxies at different times throughout the year, a company could see this metric change due to changes in reported figures for its peers.	All issuers
Pay	Pay Figures	Internal Pay Equity	Does the CEO's total awarded pay for the last reported period exceed the median pay for the other named executive officers by more than 3X? Flagged if yes. Another coarse measure of pay alignment and effectiveness, this metric is used to identify any anomalies in overall executive pay practices that might favor the CEO over the rest of the company's senior management team.	All issuers



Key Issue	Category	Key Metric	Definition	Scope
Pay	Severance & Change of Control	Golden Parachutes	Does the CEO's potential cash severance pay exceed five times their annual pay? Flagged if yes.	All issuers
Pay	Severance & Change of Control	Severance Vesting	Are unvested equity awards still eligible for vesting when the CEO's employment is terminated? Flagged if yes. This metric is designed to help in evaluating the board's effectiveness in aligning the interests of the CEO and other senior executives with those of the company's investors.	All issuers
Pay	Equity Plan Dilution	Dilution Concerns	Is the potential dilution in the company's traded shares 10% or greater? Flagged if yes. Dilution is defined as the percentage of company shares the board has set aside for use in granting incentive awards. The 10% dilution threshold is used regardless of company size.	All issuers
Pay	Equity Plan Dilution	Run Rate Concerns	Is the company's current run rate 2% or more? Flagged if yes. Run rate is defined as the percentage of company shares actually granted as incentive awards during the most recently reported period. The 2% run rate threshold is used regardless of company size.	All issuers
Pay	Non- executive Director Pay	Director Equity Policy	Has the company failed to adopt specific stock ownership guidelines for non-executive directors? Flagged if yes. Another relatively coarse but effective indicator, this metric does not evaluate the effectiveness of such standards, but simply whether the company has formally announced a policy in this area.	Equity issuers



Key Issue: Accounting - Key Metrics

Key Issue	Category	Key Metric	Definition	Scope
Accounting	Accounting Events	Accounting Investigations	Has the company announced an internal investigation into its accounting or come under investigation from a regulatory body, or been subject to fine, settlement or conviction for issues related to its accounting practices? Or has the company's auditor come under investigation for issues related to its work on the audit of the company?	All issuers
			Flagged if yes. The duration of the flag is dependent on the severity assessment.	
			Has the company's independent auditor expressed a qualified, adverse or disclaimer of opinion, expressed concerns via an emphasis of matter paragraph, have concerns been identified in respect of the auditor's ability to present an independent opinion, or has the auditor been changed in a manner that may raise concerns for investors?	
		Auditor	Flagged if yes within the past year.	
Accounting	Accounting Events	Auditor Report Concerns	This metric is based on the report of the external auditor disclosed in the annual financial statements and highlights any qualified auditor opinion or concerns raised in an emphasis of matter inserted by the auditor. Purely informational emphasis of matter paragraphs is not flagged. This metric is also evaluated on the basis of news reports or regulatory filings, including those that relate to interim or quarterly financial	All issuers
			statements in which the auditors have raised concerns.	
Accounting	Accounting Events	Internal Controls	Has there been evidence of material weakness in the company's internal control systems? Flagged if yes. The duration of the flag is dependent on the severity assessment. The event tags or categories used to create this flag include the following: Material Weakness in Internal Controls or SOX 404 Violations. Outside of the U.S., this metric is evaluated based on the assessment of the audit committee in relation to	All issuers
			the effectiveness of the internal controls.	
Accounting			Has the company had to restate previously published financial statements due to fraud, error or the mis-application of accounting standards?	
	Accounting Events	Restatements or Special Charges	Or has the company announced or reported special charges or write-offs that might raise questions as to the stewardship of the company by the board?	All issuers
			Flagged if yes. The duration of the flag is dependent on the severity assessment.	
Accounting	Accounting Events	Late Filings	Is the company currently experiencing a reporting delay or is it late in the filing of its quarterly, half-year (or interim) or	All issuers



Key Issue	Category	Key Metric	Definition	Scope
			annual reports, or its annual proxy/notice of annual meeting of shareholders? Flagged if yes. The flag will be removed once the case is assessed as concluded.	
Accounting	Accounting Auditor Auditor Independence Independer	Auditor Independence	Did the company pay its external audit firm less for audit and audit-related services than for other services in the last fiscal year? Flagged if yes.	All issuers
		This metric uses auditor fees schedules to flag companies where such independence may have been compromised.		
Accounting	Auditor Independence	Auditor Tenure	Is there evidence to identify that the external audit firm has served in excess of 20 years? Flagged if yes.	All issuers



Appendix 3: Corporate Behavior Key Metrics Definitions

Key Issue	Category	Key Metric	Definition	Scope
Business Ethics	Policies & Practices	Oversight of Ethics Issues	Indicates the company's executive body (board-level committee, C-suite or executive committee, or special task for or risk officer) responsible for oversight of business ethics and corruption issues	All issuers
Business Ethics	Policies & Practices	Bribery and Anti- corruption Policy	Indicates if the company has a policy on bribery and anti- corruption in place and the scope of that policy.	All issuers
Business Ethics	Policies & Practices	Anti- Corruption Policy for Suppliers	Indicates the scope of the bribery and anti-corruption policy in place for suppliers.	State- Owned Enterpris es
Business Ethics	Policies & Practices	Whistleblower Protection	Indicates whether the company has disclosed a whistleblower policy that provides whistleblowers with protection from retaliation.	All issuers
Business Ethics	Policies & Practices	Employee Training on Ethical Standards	Indicates the scope of employee training on anti-corruption and business ethics standards.	All issuers
Business Ethics	Policies & Practices	Regular Audits of Ethical Standards	Indicates the frequency and scope of audits related to anti- corruption and business ethics.	All issuers
Business Ethics	Policies & Practices	Anti-Money Laundering (AML) Policy	Indicates the scope of a company's policy on anti-money laundering and know your customer.	Financial s, Casinos and compani es involved in money transfer
Business Ethics	Risks & Controversies	Corruption Risk Exposure & Controversies	Indicates the company's exposure to business activities or geographies facing a higher incidence of corruption and involvement in ongoing corruption-related controversies.	All issuers
Business Ethics	Risk & Controversies	Business Ethics Controversies	Indicates the company's involvement in anticompetitive and business ethics controversies.	All issuers
Tax Transparency	Controversies	Tax Controversies	Indicates the company's involvement in ongoing tax-related controversies.	All issuers



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