MSCI ESG Ratings
Methodology: Pay Key Issue

MSCI ESG Research LLC

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Introduction

This document provides information on the components of the Pay Key Issue. Pay is a Key Issue in the Governance Pillar of the MSCI ESG Ratings model. Companies are evaluated on CEO and other executive-pay practices, including specific pay figures, where disclosed. Pay is scored primarily based on levels of pay relative to peers, as well as specific features of the pay program design.

For additional details on the MSCI ESG Ratings Model, refer to Section 2, Data, ratings and scores, of "ESG Ratings Methodology."

Exhibit 1: MSCI ESG Key Issue hierarchy

<table>
<thead>
<tr>
<th>3 Pillars</th>
<th>10 Themes</th>
<th>35 ESG Key Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment</td>
<td>Climate Change</td>
<td>Carbon Emissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Climate Change Vulnerability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Financing Environmental Impact</td>
</tr>
<tr>
<td></td>
<td>Natural Capital</td>
<td>Product Carbon Footprint</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Biodiversity &amp; Land Use</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Raw Material Sourcing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Water Stress</td>
</tr>
<tr>
<td></td>
<td>Pollution &amp; Waste</td>
<td>Electronic Waste</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Packaging Material &amp; Waste</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Toxic Emissions &amp; Waste</td>
</tr>
<tr>
<td></td>
<td>Environmental Opportunities</td>
<td>Opportunities in Clean Tech</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opportunities in Green Building</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opportunities in Renewable Energy</td>
</tr>
<tr>
<td>Social</td>
<td>Human Capital</td>
<td>Health &amp; Safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human Capital Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Labor Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supply Chain Labor Standards</td>
</tr>
<tr>
<td></td>
<td>Product Liability</td>
<td>Chemical Safety</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consumer Financial Protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Insuring Health &amp; Demographic Risk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Privacy &amp; Data Security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Product Safety &amp; Quality</td>
</tr>
<tr>
<td></td>
<td>Stakeholder Opposition</td>
<td>Responsible Investment</td>
</tr>
<tr>
<td></td>
<td>Social Opportunities</td>
<td>Community Relations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Controversial Sourcing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to Communications</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to Finance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Access to Health Care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opportunities in Nutrition &amp; Health</td>
</tr>
</tbody>
</table>
### Pay Key Issue Score

The overall Key Issue Score is based on the aggregation of the following Key Metrics using the methodology described in Section 3.5.4, Calculating Governance Scores, of “ESG Ratings Methodology.”

Each Key Metric evaluates a specific aspect of a company’s governance risk profile. Some Key Metrics are relevant only to companies with specific governance characteristics stemming from ownership type, management structure or other factors. Companies are distinguished by the type of issuer, indicated by the scope of each Key Metric below.

### Key Metrics

**Category: Pay Performance Alignment**

**CEO Equity Policy Key Metric**

**Definition**

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?

Flagged if yes.

*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.

**Scope:** Equity issuers

**Typical Scoring Contribution:** 0.2

### CEO Equity Changes Key Metric

**Definition**
Has the number of shares held by the CEO (after adjustment for any corporate actions) decreased year over year by 10% or more?

Flagged if yes.

*This metric excludes CEOs with less than two years’ tenure.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2

### Long-Term Pay Performance Key Metric

**Definition**
Does the CEO’s equity pay fail to reflect the company’s total shareholder return (TSR) performance over the last three and five years?

Flagged if yes.

*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-year and 5-year TSR.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2
Long-Term Pay Performance Versus Peers Key Metric

Definition
Does the CEO’s equity pay fail to reflect the company’s TSR performance over the last three and five years relative to its Pay Peer Group?

Flagged if yes.

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-year and 5-year TSR fall below the median for its Pay Peer Group (see Pay Peer Groups, below).

Scope: All issuers

Typical Scoring Contribution: 0.2

Short-Term Pay Performance Key Metric

Definition
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 incentives are greater than zero and two or more of the four test metrics listed above have decreased year-on-year; or
- Total short-term incentives increased and only one metric increased year-on-year; or
- Total short-term incentives increased year-on-year and all four metrics decrease; or
- Total short-term incentives remain the same (for non-zero amounts) and two or three metrics decreased year-on-year.

“Total short-term incentives” for the purpose of this Key Metric include any bonus (in the U.S. 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.

Scope: All issuers

Typical Scoring Contribution: 0.2
Pay Linked to Sustainability Key Metric

Definition
Has the company failed to incorporate links to sustainability performance in its current executive pay policies?

Flagged if yes.

This metric is based entirely on the company's own reporting. It considers whether one or more sustainability metrics are used to determine annual and/or long-term incentive pay policy and does not consider the effectiveness of those metrics. This metric is evaluated for the CEO and/or other executive directors. Companies that do not issue any incentive pay will also be flagged under this Key Metric.

Scope: All issuers other than externally managed companies.¹

Typical Scoring Contribution: 0.2

Clawbacks & Malus Key Metric

Definition
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.

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.

Scope: All issuers

Typical Scoring Contribution: 0.2

¹ MSCI ESG Research classifies a company as externally managed if management functions are outsourced to a separate company (a “management company”) that is not a subsidiary of the company. Companies with a limited partnership structure are excluded from this definition.
Golden Hellos Key Metric

**Definition**
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.

*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 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 five executives (U.S. – named executive officers).*

**Scope:** All issuers

**Typical Scoring Contribution:** Variable, based on event severity: Minor 0.0, Moderate 0.3, Severe 0.5, Very Severe 1.0

Pay Controversy Key Metric

**Definition**
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.

**Scope:** All issuers

**Typical Scoring Contribution:** Variable, based on event severity: Minor 0.0, Moderate 0.5, Severe 1.0, Very Severe 2.0
**Significant Vote Against Pay Practices Key Metric**

**Definition**
For the most recently reported period, did the company receive a negative vote in excess of 10% on its pay policies and practices?
Flagged if yes.

*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.*

**Scope**: All issuers

**Typical Scoring Contribution**: Variable, based on resolution outcome, vote data and consecutive years:

- Range: 0.05 to 0.5
- Average: 0.158

**Category**: Pay Figures

**Executive Pay Disclosure Key Metric**

**Definition**
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.*

*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).*

**Scope**: All issuers

**Typical Scoring Contribution**: 1.2
CEO Pay Total Realized Key Metric

**Definition**
Does the most recently reported total realized CEO pay figure fall into an extreme range relative to the company’s pay peer group?²

Flagged if yes.

*Flagged if CEO total actual pay falls within the top decile of CEO realized pay values for the company’s pay peer group (see Pay Peer Groups, below). 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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2

CEO Pay Total Awarded Key Metric

**Definition**
Does the most recently reported total awarded CEO pay figure fall into an extreme range relative to the company’s pay peer group?

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 peer group (see Pay Peer Groups, below). 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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2

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² The top decile for all such reported values in the peer group are flagged.

<table>
<thead>
<tr>
<th>Pay Peer Group Size</th>
<th>Companies Flagged</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 or more</td>
<td>Top decile</td>
</tr>
<tr>
<td>5 to 10</td>
<td>Only top company flagged</td>
</tr>
<tr>
<td>1 to 4</td>
<td>None flagged</td>
</tr>
</tbody>
</table>
CEO Pay Total Fixed Key Metric

**Definition**
Does the most recently reported total fixed CEO pay figure fall into an extreme range relative to the company’s pay peer group?

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 peer group (see Pay Peer Groups, below). 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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2

CEO Pay Perks & Other Pay Key Metric

**Definition**
Does the most recently reported CEO perquisites (perks) 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** and **100 billion**.
- **USD 120k** for companies with market cap between **USD 4 billion** and **10 billion**.
- **USD 90k** for companies with market cap between **USD 340 million** and **4 billion**.
- **USD 75k** for companies with market cap below **USD 340 million**.

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2
CEO Pay NQDC Key Metric

**Definition**
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 the company’s pay peer group?

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 (see Pay Peer Groups, below). 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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2

CEO Pay Pension Key Metric

**Definition**
Is the most recently reported CEO accumulated pension figure (divided by the number of years of pensionable service) excessive relative to the company’s pay peer group?

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 (see Pay Peer Groups, below). 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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2
Internal Pay Equity Key Metric

Definition
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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2

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Category: Severance & Change of Control

Golden Parachutes Key Metric

Definition
Does the CEO’s potential cash severance pay exceed five times their annual pay?

Flagged if yes.

**Scope:** All issuers

**Typical Scoring Contribution:** 0.3

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Severance Vesting Key Metric

Definition
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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.1
Category: Equity Plan Dilution

Dilution Concerns Key Metric

**Definition**
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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.1

Run Rate Concerns Key Metric

**Definition**
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.*

**Scope:** All issuers

**Typical Scoring Contribution:** 0.2
Category: Non-executive Director Pay

Director Equity Policy Key Metric

**Definition**
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.*

**Scope**: Equity issuers

**Typical Scoring Contribution**: 0.1
## Total Pay Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Total Fixed</th>
<th>Total Annual</th>
<th>Total Awarded (&quot;Summary&quot;)</th>
<th>Total Realized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fixed Pay</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salary (in respect of employment/executive role)</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Fees (in respect of directorship)</td>
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<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Pension</td>
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<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>All Other Compensation</td>
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<td><strong>Variable Pay</strong></td>
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<td>Short-term Incentives:</td>
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</tr>
<tr>
<td>Cash Bonus &amp; Other Non-Equity Incentive Plan</td>
<td>×</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Long-term Incentives</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Stock Options granted, Shares Awards granted, Cash</td>
<td>×</td>
<td>×</td>
<td>✔</td>
<td>×</td>
</tr>
<tr>
<td>Long-term Incentive Plans granted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stock Options exercised, Share Awards vested, Cash</td>
<td>×</td>
<td>×</td>
<td>×</td>
<td>✔</td>
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<tr>
<td>Long-term Incentive Plans vested</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
Pay Peer Groups

The pay peer groups are used in the Key Metrics for comparative and benchmarking purposes.

Determining Pay Peer Group Allocation

Companies are assigned pay peer groups based on three criteria:

- Industry;
- Size (based on market capitalization); and
- Regional peers.

Industry

This is based on the Global Industry Classification Standard (GICS®).³

Market Capitalization

This is based on the following size references:

<table>
<thead>
<tr>
<th></th>
<th>Developed Markets</th>
<th>Emerging Markets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large-Cap</td>
<td>≥USD 10.901 billion</td>
<td>≥USD 5.45 billion</td>
</tr>
<tr>
<td>Mid-Cap</td>
<td>≥USD 4.04 billion and &lt;USD 10.901 billion</td>
<td>≥USD 2.02 billion and &lt;USD 5.45 billion</td>
</tr>
<tr>
<td>Small-Cap</td>
<td>≥USD 342 million and &lt;USD 4.04 billion</td>
<td>≥USD 171 million and &lt;USD 2.02 billion</td>
</tr>
<tr>
<td>Micro-Cap</td>
<td>&lt;USD 342 million</td>
<td>&lt;USD 171 million</td>
</tr>
</tbody>
</table>

Regional Peers

This divides companies into regional peers identified based on a company’s Home Market.

³ GICS is the global industry classification standard jointly developed by MSCI and S&P Global Market Intelligence.
- Developed Americas;
- Other developed markets; and
- Emerging markets.

Home Market allocation is set out in Appendix 6: Home-Market selection of “ESG Ratings Methodology.”
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