MSCI ESG Ratings
Methodology: Financing Environmental Impact Key Issue

MSCI ESG Research LLC
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Introduction

This document provides essential information on the components of the Financing Environmental Impact Key Issue to enable users of ESG Ratings to understand how our outputs are determined. Financing Environmental Impact is a Key Issue in the Environmental Pillar of the MSCI ESG Ratings model. Financial institutions are evaluated on the environmental risks of their lending and underwriting activities and their ability to capitalize on opportunities related to green finance.

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>33 ESG Key Issues</th>
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</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>Climate Change</td>
<td>Carbon Emissions</td>
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<td></td>
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<td>Climate Change Vulnerability</td>
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<td>Financing Environmental Impact</td>
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<td>Product Carbon Footprint</td>
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<td></td>
<td>Natural Capital</td>
<td>Biodiversity &amp; Land Use</td>
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<td></td>
<td>Pollution &amp; Waste</td>
<td>Raw Material Sourcing</td>
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<td></td>
<td>Environmental Opportunities</td>
<td>Water Stress</td>
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<td></td>
<td></td>
<td>Pollution &amp; Waste</td>
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<td></td>
<td></td>
<td>Packaging Material &amp; Waste</td>
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<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>
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<tr>
<td></td>
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<td>Opportunities in Green Building</td>
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<td></td>
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<td>Opportunities in Renewable Energy</td>
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<tr>
<td>Social</td>
<td>Human Capital</td>
<td>Health &amp; Safety</td>
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<td>Human Capital Development</td>
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<td>Labor Management</td>
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<td></td>
<td>Supply Chain Labor Standards</td>
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<td>Product Liability</td>
<td>Chemical Safety</td>
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<td>Consumer Financial Protection</td>
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<td>Privacy &amp; Data Security</td>
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<td>Product Safety &amp; Quality</td>
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<td>Responsible Investment</td>
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<tr>
<td></td>
<td>Stakeholder Opposition</td>
<td>Community Relations</td>
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<td>Controversial Sourcing</td>
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<tr>
<td></td>
<td>Social Opportunities</td>
<td>Access to Finance</td>
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<td>Access to Health Care</td>
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<td></td>
<td>Governance</td>
<td>Corporate Governance</td>
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<td>Board</td>
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Risks associated with this Key Issue

- Increased credit defaults from borrowers that suffer losses related to a range of environmental concerns, including operational disruption, loss of market access, liabilities and asset impairment.

- Damage to corporate reputation from financing environmentally harmful projects.

Financing Environmental Impact Key Issue Score

The Financing Environmental Impact Key Issue Score evaluates the company’s level of exposure to, and management of risks on this Key Issue. The Key Issue Score on this Key Issue is based on the Exposure Score and the Management Score using the formula below. The Exposure Score and the Management Score are combined such that a higher level of exposure requires a higher level of demonstrated management capability in order to achieve the same overall Key Issue Score.

\[
K_{I_i} = 7 - (\max(E_{EXP_i}, 2) - M_{GMT_i})
\]

Where:

- \(K_{I_i}\) is the Key Issue Score for company \(i\).
- \(E_{EXP_i}\) is the Exposure Score for company \(i\).
- \(M_{GMT_i}\) is the Management Score for company \(i\).

Financing Environmental Impact Management Score

The Management Score evaluates the company’s ability to manage its exposure to risks on this Key Issue. It is based on an average of the scores associated with each of the Management Score categories listed below, modified by Controversies. These scores are derived from data points that are scored on a 0-10 scale, with 10 corresponding to best practice and 0 corresponding to lack of management. Refer to
Section 3.3, Analyzing risk management, of "ESG Ratings Methodology" for additional details. Sources are company disclosures except where otherwise indicated. The following formula is used to calculate the Financing Environmental Impact Management Score - Excluding Controversies:

\[
MGMT_{FEI,i} = \frac{ERMS_{FEI,i} + ECP_{FEI,i} + ERI_{FEI,i} + ERO_{FEI,i} + EFO_{FEI,i}}{5}
\]

Where:
- \( MGMT_{FEI,i} \) is the Financing Environmental Impact Management Score - Excluding Controversies for company \( i \).
- \( ERMS_{FEI,i} \) is the ESG Risk Management (ESRM) Systems Score for company \( i \).
- \( ECP_{FEI,i} \) is the Environmental Credit Policy Score for company \( i \).
- \( ERI_{FEI,i} \) is the ESRM Integration Score for company \( i \).
- \( ERO_{FEI,i} \) is the ESRM Oversight Score for company \( i \).
- \( EFO_{FEI,i} \) is the Environmental Finance Opportunities Score for company \( i \).

The following data points, without constituting an exhaustive list, are representative of the inputs to the Management Score and are used in the Management Score calculation:

**Management Score category: ESG Risk Management (ESRM) Systems Score**

- **Formal management systems to assess ESG risks in financing activities.**
  
  **Definition:** Describes management systems to assess ESG risks in financing activities. Best practice includes consideration of ESG factors in credit assessments and risk appetite statement.

- **Scope of management system to assess ESG risks in financing activities.**
  
  **Definition:** The scope of a company’s formal management systems to assess ESG risks in financing activities. Best practice is to include all credit and investment banking operations.
Management Score category: ESRM Integration Score

- Involvement of group credit risk in ESG due diligence.
  
  **Definition:** The extent to which the group responsible for credit risk management is directly involved in ESG due diligence.

- ESG due diligence triggers and risk-escalation process clearly defined.
  
  **Definition:** The level of transparency provided around the escalation process for triggering credit evaluations based on ESG risks. Best practices are to clearly define the ESG risk escalation process, provide details on thresholds for triggering escalation, and provide examples of extra due diligence where necessary.

Management Score category: ESRM Oversight Score

- Oversight of ESG risk management in financing activities.
  
  **Definition:** The group or individual that has ultimate responsibility over the integration of ESG considerations in financing and investment activities.

- Evidence of board-level engagement on climate-related risk.
  
  **Definition:** The extent of engagement from the board of directors on climate risk.

- Conducts climate-related risk analysis.
  
  **Definition:** The company's initiatives to assess the business risks associated with climate change. Best practice is to conduct group-wide assessments of business risks using scenario analysis.

Management Score category: Environmental Credit Policy Score

- Credit policy related to agriculture.
**Definition**: Indicates whether the company has developed binding or non-binding environmental credit policies, or has adopted voluntary standards, related to agriculture industry financing.

- **Credit policy related to power utilities.**
  
  **Definition**: Indicates whether the company has developed binding or non-binding environmental credit policies, or has adopted voluntary standards, related to power industry financing.

- **Credit policy related to mining.**
  
  **Definition**: Indicates whether the company has developed binding or non-binding environmental credit policies, or has adopted voluntary standards, related to mining industry financing.

- **Credit policy related to oil and gas.**
  
  **Definition**: Indicates whether the company has developed binding or non-binding environmental credit policies, or has adopted voluntary standards, related to oil and gas industry financing.

- **Credit policy related to biodiversity.**
  
  **Definition**: Indicates whether the company has developed binding or non-binding environmental credit policies, or has adopted voluntary standards, related to biodiversity.

**Management Score category: Environmental Finance Opportunities Score**

- **Involvement in green financing and securities.**
  
  **Definition**: The extent to which a company invests in green securities or is involved in the structuring of green financing.

- **Sustainability-related financial product development.**
**Definition:** The extent to which a company has integrated sustainability factors into its financial products, either through pricing mechanisms or other related green financing methods.

**Treatment of Covered Bonds**

For covered bond issuers, the Financing Environmental Impact Management Score is calculated through a “market standard” approach. Because these issuers are typically refinancing vehicles for multiple loan originators in the same domicile country, the market standard is computed as the average Financing Environmental Impact Management Score of all loan-originating credit institutions with an MSCI ESG Rating in the relevant country.

**Controversies**

A controversy deduction ranging from 0 to 5 points is subtracted from the overall Management Score, based on the severity and type of controversies facing the company on this Key Issue. The following categories of controversies are used in the assessment.

- Controversial investment controversies.

For more details on how controversies are included in the MSCI ESG Ratings model, refer to Section 3.3.2, Controversies cases, of “ESG Ratings Methodology.”

**Financing Environmental Impact Exposure Score**

The Financing Environmental Impact Exposure Score evaluates the company’s exposure to risks on this Key Issue. It is based on the Business and Company-Specific Exposure Scores. The Business Exposure Score and Company-Specific Exposure Score are scored on a 0-10 scale, with 10 corresponding to the highest risk and 0 corresponding to the lowest risk. Refer to Section 3.2, Analyzing Risk Exposure, of “ESG Ratings Methodology” for additional details. The following formula is used in the Financing Environmental Impact Exposure Score calculation:

\[
EXP_{FEI,i} = BUS_{FEI,i}(1 + 0.1( COM_{FEI,i} - 5))
\]
Where:

- $EXP_{FEI,i}$ is the Financing Environmental Impact Exposure Score of company $i$.
- $BUS_{FEI,i}$ is the Business Exposure Score of company $i$.
- $COM_{FEI,i}$ is the Company-Specific Exposure Score of company $i$.

Exhibit 2: Exposure Score components

Business Exposure Score

The Business Exposure Score is a weighted average of the Business Segment Exposure Scores of a company’s business segments. Scores are weighted by the proportion of a company’s total assets in each business segment,\(^1\) using the following formula to calculate the Business Exposure Score:

$$BUS_{FEI,i} = \sum_{j=1}^{n_j} w_{Asset,i,j} BSE_{FEI,j}$$

\(^1\) The percentage of assets is typically calculated as the company-reported asset value of the segment divided by the total asset value. In certain cases, industry-specific metrics are used to calculate the percentage of assets, such as power generation, production volume or reserve value. In cases where neither segment assets nor a relevant industry-specific proxy is available, the percentage is calculated based on segment revenue.
Where:

- \( BSE_{FEI,j} \) is the Business Segment Exposure Score for business segment \( j \).
- \( \omega_{ASSET,i,j} \) is the weight of business segment \( j \) for company \( i \) based on the contribution to total company assets.
- \( n_i \) is the number of business segments of company \( i \).

**Business Segment Exposure Scores**

The Business Segment Exposure Score of a business segment is based on a mapping of the business segment as disclosed by the company to a corresponding business activity. MSCI ESG Research uses the Standard Industrial Classification (SIC) system along with industry-specific adjustments to define business activities. The score associated with a business activity is used to calculate a Business Segment Exposure Score. Each business activity score is determined by a qualitative assessment of whether a business activity has a core involvement in lending or underwriting activities. A higher involvement will result in a higher Business Segment Exposure Score for the business segment.

**Company-Specific Exposure Score**

The Company-Specific Exposure Score is determined by the weighted average of environmental risk associated with the industry exposures of a loan portfolio.

\[
COM_{FEI,i} = \left( Z_{ERI,i} \times 2 \right) + 3
\]

Where:

- \( COM_{FEI,i} \) is the Company-Specific Exposure Score for company \( i \).
- \( Z_{ERI,i} \) is the standardized Environmental Risk Intensity of company \( i \)’s loan portfolio.

The standardized Environmental Risk Intensity of company \( i \)’s loan portfolio is calculated using the following formula:

\[
Z_{ERI,i} = \frac{AVG_{ERI,i} - \mu_{ACW_i}}{\mu_{ACW_i}}
\]
Where:

- $AVG_{ERI,i}$ is the weighted average environmental risk intensity of company $i$ based on its loan portfolio.
- $\mu_{ACWI}$ is the average of weighted average environmental risk intensities of companies in the MSCI ACWI Index.
- $\sigma_{ACWI}$ is the standard deviation of weighted average environmental risk intensities of companies in the MSCI ACWI Index.

The weighted average environmental risk intensity of the company is the weighted average of environmental risk associated with the industry exposures of the loan portfolio, calculated using the following formula:

$$AVG_{ERI,i} = \frac{\sum_{k=1}^{n_i} lpc_{k,i} ERI_k}{\sum_{k=1}^{n_i} lpc_{k,i}}$$

Where:

- $lpc_{k,i}$ is the value of loans to industry $k$ as a proportion of the total loan book of company $i$.
- $ERI_k$ is the environmental risk intensity score of industry $k$ based on the industry’s average risk exposure to environmental issues.
- $n_i$ is the number of industry loan segments disclosed by company $i$.

**Data Sources**

The following sources are used to determine the Financing Environmental Impact Exposure Score:

MSCI ESG Research, Refinitiv, company disclosures.

**Model Update History**

- In December 2022, the Financing Environmental Impact Key Issue was updated to score a covered bond issuer’s risk exposure and risk management based on the cover pool composition and the average Financing Environmental Impact Management Score of all loan-originating
credit institutions with an MSCI ESG Rating in the relevant country, respectively.

- In November 2020, the Financing Environmental Impact Key Issue was updated with a new methodology to assess the environmental risk of bank loan portfolios based on their industry credit exposures.
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