

ESG RATINGS

METHODOLOGY

Executive Summary

MSCI ESG Research

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1 EXECUTIVE SUMMARY

From natural resource scarcity to changing governance standards, from global workforce management to the evolving regulatory landscape, ESG factors can impact the long-term risk and return profile of investment portfolios. MSCI ESG Ratings are designed to help investors to understand ESG risks and opportunities and integrate these factors into their portfolio construction and management process.

Our global team of 140 experienced research analysts assesses thousands of data points across 37 ESG Key Issues, focusing on the intersection between a company's core business and the industry issues that can create significant risks and opportunities for the company. Companies are rated on a AAA-CCC scale relative to the standards and performance of their industry peers.

Figure 1 ESG Rating Framework and Process Overview



DATA

1000+ data points on ESG policies, programs, and performance; Data on **65,000** individual directors; **13 years** of shareholder meeting results



EXPOSURE METRICS

- How exposed is the company to each material issue? Based on over **80** business and geographic segment metrics

MANAGEMENT METRICS

How is the company managing each material issue?
600 policy/program metrics, 240 performance metrics;

96 Governance KeyMetrics





100+ specialized datasets (government, NGO, models)

Company disclosure (10-K, sustainability report, proxy report);

1600+ media sources monitored daily (global and local news sources, government, NGO).

MONITORING & QUALITY REVIEW

Systematic ongoing daily monitoring of controversies and governance events;

In-depth quality review processes at all stages of rating, including formal committee review.

KEY ISSUE SCORES & WEIGHTS

37 Key Issues selected annually for each industry and weighted based on MSCI's materiality mapping framework.

ESG RATING (AAA-CCC)

Issue scores and weights combine to overall ESG rating relative to industry peers.

E, S, G scores also available

INSIGHT

Specialized ESG research team provides additional insight through:

Company reports Industry reports Thematic reports Analyst calls & webinars

DATA OUTPUTS



Access to selected underlying data Ratings, scores, and weights on 350,000 securities 16 years of history



1.1 ESG RATING PROCESS OVERVIEW

DATA SOURCES

To assess companies' exposure to and management of ESG risks and opportunities, we collect data from the following sources:

- Macro data at segment or geographic level from academic, government, NGO datasets
- Company disclosure (10-K, sustainability report, proxy report, AGM results, etc.)
- Government databases, 1600+ media, NGO, other stakeholder sources

Companies are invited to participate in a formal data verification process.

MONITORING AND QUALITY REVIEW

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 analyst review and re-rating. Companies receive an in-depth review at least annually.

Formal in-depth quality review processes take place at each stage of analysis, including automated and quality checks of data and rating publication; industry and market lead oversight of ratings and reports; Methodology Committee approval of any exceptions, truncations, or major (2+) rating changes; and a Ratings Review Committee to review contentious cases.

RISK EXPOSURE AND RISK MANAGEMENT ANALYSIS

MSCI ESG Ratings calculate each company's exposure to key ESG risks based on a granular breakdown of a company's business: its core product or business segments, the locations of its assets or revenues, and other relevant measures such as outsourced production.

The analysis then takes into account the extent to which a company has developed robust strategies and demonstrated a strong track record of performance in managing its specific level of risks or opportunities. Ongoing or structural controversies occurring within the last three years lead to a deduction from the overall management score on each issue.

KEY ISSUE SCORES AND WEIGHTS

MSCI ESG Ratings identify six to ten key ESG issues where companies in that industry currently generate large environmental or social externalities; these are issues where some



companies may be forced to internalize unanticipated costs associated with those externalities in the future. Corporate Governance is assessed for all companies.

Weights are set at the GICS Sub-Industry level (8-digit) based on each industry's relative impact and the time horizon associated with each risk. Key Issues and weights undergo a formal review and feedback process at the end of each calendar year.

Company-specific exceptions are allowed, subject to committee approval, for companies with diversified business models, facing controversies, or based on industry rules.

Figure 2 MSCI ESG Key Issue Hierarchy

3 Pillars	10 Themes	37 ESG Key Issues	
Environment	Climate Change	Carbon Emissions*	Financing Environmental Impact
		Energy Efficiency	Climate Change Vulnerability
		Product Carbon Footprint	
	Natural Resources	Water Stress*	Raw Material Sourcing
		Biodiversity & Land Use	
	Pollution & Waste	Toxic Emissions & Waste*	Electronic Waste
		Packaging Material & Waste	
	Environmental	Opportunities in Clean Tech	Opp's in Renewable Energy
	Opportunities	Opportunities in Green Building	
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
		Financial Product Safety	Health & Demographic Risk
	Stakeholder Opposition	Controversial Sourcing	
	Social Opportunities	Access to Communications	Access to Health Care
		Access to Finance	Opp's in Nutrition & Health
Governance	Corporate Governance*	Board**	Ownership**
		Pay**	Accounting**
	Corporate Behavior	Business Ethics*	Corruption & Instability
		Anti-Competitive Practices*	Financial System Instability

^{*} indicates "universal" issues assessed for all companies in MSCI World

ESG RATINGS

To arrive at a final letter rating, the weighted averages of the Key Issue Scores are aggregated and companies' scores are normalized by their industries. After any overrides are factored in, each company's Final Industry-Adjusted Score corresponds to a rating

^{**} Board, Pay, Ownership, and Accounting carry weight in the ESG Rating model for all companies. Currently, they contribute to the Corporate Governance score directly and 0-10 sub-scores are not available.



between best (AAA) and worst (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.

1.2 PRODUCT FEATURES

MSCI ESG Ratings clients receive access to a database of company reports and industry reports. Each company report includes relevant ESG performance data as well as an analysis of possible ESG risks and opportunities facing the company. Industry reports provide updates on the ESG landscape of each industry, and allow for benchmarking of how global players are positioned to anticipate challenges and to tap opportunities relative to peers.

MSCI ESG Ratings clients also receive scores for each company that include the final company rating and overall industry-adjusted score; weights and scores for each of the E, S, and G pillars; weights and scores for each of the Issues that contribute to the overall rating; and weights and scores for additional ESG issues that clients may incorporate into their own analysis (Carbon Emissions, Water Stress, Toxic Emissions & Waste; Labor Management; Health & Safety; Corporate Governance; Business Ethics; Anticompetitive Practices).

MSCI ESG Ratings scores and/or reports are currently available on MSCI's proprietary platform, MSCI ESG Manager, as well as through FactSet, POINT, StyleResearch, and MSCI's BarraOne and Barra Portfolio Manager platforms.

When used in conjunction with conventional financial analysis and valuation methods, MSCI ESG Ratings are designed to help clients:

- Integrate ESG factors into their investment approaches;
- Screen portfolios and trades for emerging and overlooked risks;
- Generate investment ideas using positive and negative outliers on specific ESG issues;
- Generate investment ideas based on ESG developments impacting key industry drivers;
- Conduct due diligence for transactions;
- Determine opportunities for engagement with company management;
- Support implementation of the UN Principles for Responsible Investment (PRI):
 - Smoothly integrate ESG considerations into the investment processes by focusing on the most significant issues – Principle 1*
 - Support efforts to engage companies on ESG issues Principle 2*
 - Support efforts to encourage companies to make material ESG-related disclosure by providing benchmarking against peers on key ESG metrics – Principle 3*
 - Help asset owners to monitor their implementation of ESG principles Principle 4*
 - Help asset managers to report on ESG mandates Principle 6*



*Source: http://www.unpri.org/about-pri/the-six-principles/

1.3 COVERAGE

The ESG Ratings coverage universe comprises the following as of December 2014:

- MSCI World Index
- MSCI Emerging Markets Index
- MSCI US Investable Market Index (IMI)
- MSCI UK IMI (new)
- MSCI Nordic IMI (new)
- MSCI Australia IMI (new)
- MSCI South Africa IMI
- MSCI Canada IMI
- Fixed Income: ESG Ratings coverage of over 84% of the market value of a widely used global fixed income benchmark, including:
 - Approximately 90% of the corporate investment grade (listed and non-listed)
 - Approximately 90% of the covered bonds
 - Approximately 99% of the Treasuries/Sovereign*
 - Approximately 85% of the government related (ex-Sovereign)*
 - *The overall ESG Rating for government-related bond issuers will be either in the ESG Ratings or Government ESG Rating framework.
- More than 8,000 issuers linked to 280,000 individual securities including selected Agencies and Supranationals

Additions to the MSCI ACWI Index and the US IMI will be rated within one quarter from their addition to the relevant index, while other companies will be rated within two quarters from their addition to the relevant index.

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 analyst review and re-rating. Companies receive an in-depth review at least annually.



Note: The full set of governance metrics is available to be viewed and downloaded with an ESG Ratings subscription. A subset of metrics is available to be viewed in the company profile with an IVA subscription.

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