

MSCI ESG METRICS

FROM MSCI ESG RESEARCH LLC

A BIG DATA APPROACH TO ESG: DELIVERING AN EXTENSIVE SET OF STANDARDIZED ESG DATA AND SIMPLE FLAGGED METRICS THAT ARE COMPARABLE ACROSS A BROAD UNIVERSE

MSCI ESG Metrics is a tool designed to give institutional investors a broad set of standardized ESG data and simple flagged metrics that are comparable across a broad universe of 8,500 companies in the MSCI ACWI Investable Market Index (IMI) coverage universe. Developed based on 40 years of experience collecting, standardizing and modeling ESG metrics, the data can be used as inputs for in-house analytical models or to develop proprietary investment strategies.

FEATURES

56
Metrics (-1, 0, 1)

Simple flagged metrics comparable across all 8,500 companies in coverage

-1

NEGATIVE

0

NEUTRAL

1

POSITIVE

230
Standardized Underlying
Data Points

Additional underlying data designed to enable investors to measure the overall exposure of companies and portfolios to ESG risks.

8
Risk Exposure Scores

Exposure scores (ranging from 0-10) measure to what extent a company's business is vulnerable to a particular ESG risk. Higher scores on exposure indicate greater risk on the issue. The 8 scores below are available for all companies in the MSCI ACWI IMI coverage universe.

ESG METRICS DATASET:



Risk Exposure

A new risk exposure dataset that leverages MSCI ESG Research's proprietary ESG risk models, mapping over 50,000 individual business and geographic segments to 22 macro risk factors, such as carbon regulation, water stressed regions, and corruption risks.



Practices

The practices dataset offers insight into a company's capabilities to manage ESG risks or capitalizing market ESG opportunity such as policy commitments, certifications, risk mitigation initiatives and programs, and targets to improve performance.



Performance

The performance dataset evaluates the company's historical track record on managing the specific ESG risk. Performance data involves collecting, standardizing, and benchmarking a range of quantitative indicators where applicable.



Controversies

The controversies dataset offers insights into a company's involvement in notable environmental, social and governance controversies (e.g. lawsuits, disputes, regulatory actions) related to the company's operations and/or products, possible breaches of international norms and principles.

UNIQUE RISK EXPOSURE DATASET

The new risk exposure dataset that leverages MSCI ESG Research's proprietary ESG risk models, mapping over 50,000 individual business and geographic segments to 22 macro risk factors, such as carbon regulation, water stressed regions, and corruption risks.

The risk exposure metrics and underlying data indicate the level of exposure that each company faces to a given risk based on the nature of its business and where it operates. Risk exposure metrics combine company-specific operational data with macro-level data relevant to each ESG issue.

22

Exposure Metrics

8

Exposure Scores

79

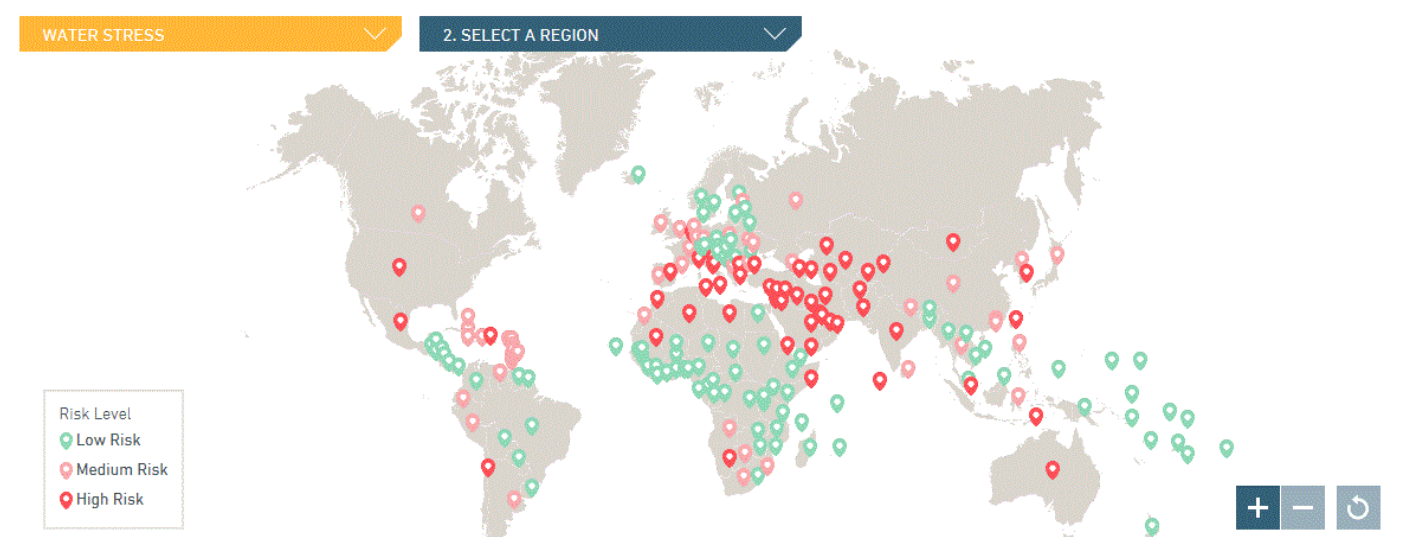
Raw Data Points

50,000

Mapped business and geographic segments

8,500

All companies in the ACWI IMI Index covered



EXAMPLE OF RISK EXPOSURE UNDERLYING DATA: BUSINESS AND GEOGRAPHIC SEGMENT RISK EXPOSURE UNDERLYING DATA

Business Segments	Business Segment Asset Percentage (%)	Business Segment Exposure to Carbon-Intensive Operations (High, Medium, Low)
Asphalt Paving Mixtures and Blocks	5.2	Medium
Gum and Wood Chemicals	2.1	High
Asphalt Paving Mixtures and Bloacks	8.4	Medium
Cement, Hydraulic	27.9	High
Ready-Mixed Concrete	18.7	Medium
Construction Sand and Gravel	37.7	Medium

Geographic Segments	Geographic Segment Asset Percentage (%)	Geographic Segment Exposure to Carbon Regulation (High, Medium, Low)
United States of America	98.7	High
All Countries	1.3	Medium

56 FLAGGED METRICS

- Simple flagged metrics comparable across all 8,500 companies in coverage.
- Covering risk exposure, controversies, performance and practices.
- Available in both numeric (1,0) and non-numeric (yes, no) outputs.

DELIVERY OPTIONS

- Data Feeds
- MSCI ESG Manager



Climate Change



Natural Capital



Pollution & Waste



Environmental Opportunities



Human Capital



Product Liability



Stakeholder Opposition



Corporate Behavior

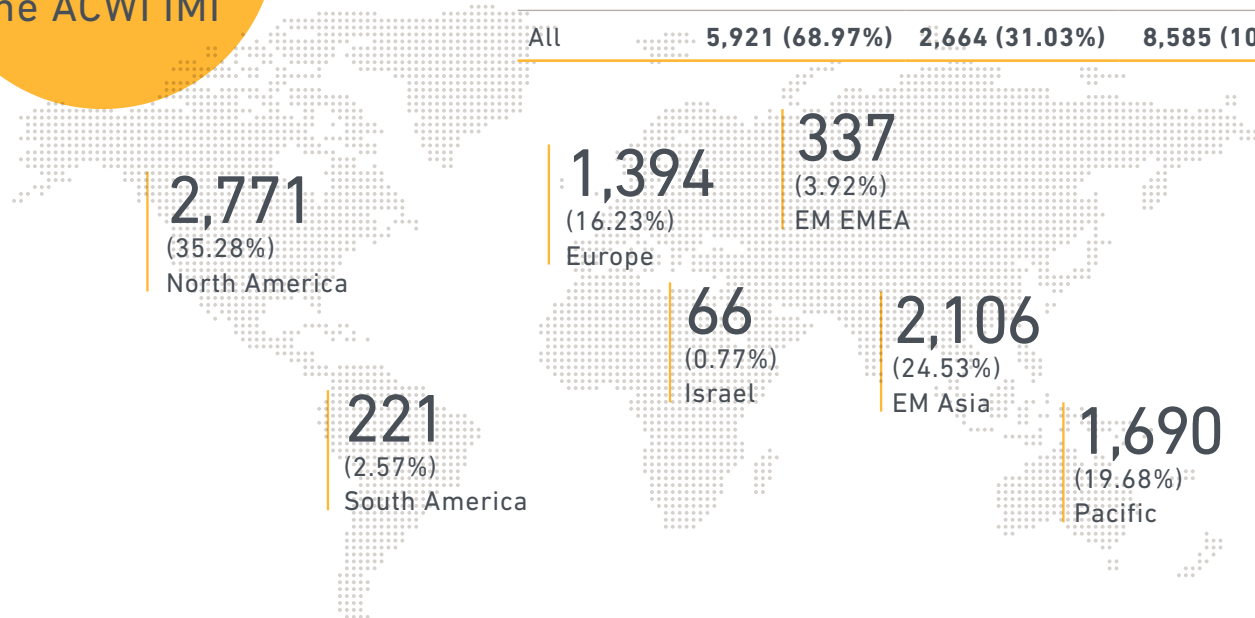
Climate Change	Natural Capital	Pollution & Waste	Environmental Opportunities	Human Capital	Product Liability	Stakeholder Opposition	Corporate Behavior
<p>Risk Exposure</p> <ul style="list-style-type: none"> • Geographic Exposure to Carbon Regulation (-1,0) • Business Exposure to Carbon-Intensive Operations (-1,0) • Geographic Exposure to Climate Vulnerable Regions (-1,0) • Reliance on Carbon-Intensive Supply Chain (-1, 0) <p>Controversies</p> <ul style="list-style-type: none"> • Climate Change Controversies (-1, 0) <p>Performance</p> <ul style="list-style-type: none"> • Three-year trend of average carbon emissions intensity (-1, 0, 1) • Three-year average carbon emissions intensity (tCO2e / USD million sales) relative to GICS Industry peer median (-1,0,1) 	<p>Risk Exposure</p> <ul style="list-style-type: none"> • Business Exposure to Operations with Land or Ecosystem Disturbance (-1,0) • Geographic Exposure to Fragile Ecosystems (-1,0) • Geographic Exposure to Water Stressed Regions (-1,0) • Business Exposure to Water-Intensive Operations (-1,0) <p>Controversies</p> <ul style="list-style-type: none"> • Environmental Impacts on Communities Controversies (-1, 0) • Operational Impacts on Ecosystems Controversies (-1, 0) • Environmentally Controversial Investments Controversies (-1, 0) • Raw Material Impact Controversies (-1, 0) • Water Stress Controversies (-1, 0) 	<p>Risk Exposure</p> <ul style="list-style-type: none"> • Business Exposure to Operations Producing High Levels of Packaging Waste (-1,0) • Business Exposure to Operations Producing High Levels of Toxic Emissions and Waste (-1,0) <p>Controversies</p> <ul style="list-style-type: none"> • Toxic Emissions & Waste Controversies (-1, 0) 	<p>Practices</p> <ul style="list-style-type: none"> • Alternative Energy Products and Services (1, 0) • Energy Efficiency Products and Services (1, 0) • Green Building Products and Services (1, 0) • Pollution Prevention and Control Products and Services (1, 0) • Sustainable Water Products and Services (1, 0) 	<p>Risk Exposure</p> <ul style="list-style-type: none"> • Business Exposure to Injury-Prone Operations (-1,0) • Geographic Exposure to Poor Workplace Safety Standards (-1,0) • Reliance on Highly-Skilled Workforce (-1, 0) • Business Exposure to Labor-Intensive Operations (-1,0) • Geographic Exposure to Frequent Work Stoppages (-1,0) <p>Controversies</p> <ul style="list-style-type: none"> • Controversial Workplace Accidents Controversies (-1, 0) • Discrimination and Diversity Controversies (-1, 0) • Controversial Working Conditions Controversies (-1, 0) • Collective Bargaining and Union Labor Controversies (-1, 0) • Supply Chain Labor Controversies (-1, 0) 	<p>Risk Exposure</p> <ul style="list-style-type: none"> • Geographic Exposure to Chemical Safety Regulations (-1,0) • Involvement in Business Commonly Reliant on High Concern Chemicals (-1, 0) • Exposure to Business Prone to Data breaches or Handles High Volumes of Customer Data (-1,0) • Geographic Exposure to Privacy Regulations (-1,0) • Exposure to Business with Product Safety Risks (-1, 0) <p>Controversies</p> <ul style="list-style-type: none"> • Chemical Safety Controversies (-1, 0) • Data Security Breaches Controversies (-1, 0) • Customer Fraud Controversies (-1, 0) • Discriminatory Access to Basic Services Controversies (-1, 0) • Marketing Controversies (-1, 0) • Product Safety & Quality Controversies (-1, 0) 	<p>Controversies</p> <ul style="list-style-type: none"> • Social Impacts on Communities Controversies (-1, 0) • Social Impacts of Raw Materials Controversies (-1, 0) • Human Rights Concerns Controversies (-1, 0) 	<p>Risk Exposure</p> <ul style="list-style-type: none"> • Geographic Exposure to Corruption & Instability (-1,0) • Business Exposure to Operations Commonly Associated with Corrupt Practices (-1,0) <p>Performance</p> <ul style="list-style-type: none"> • Tax Gap Greater Than 20% (-1, 0) • Foreign Market Revenue Greater Than 20% (-1, 0) <p>Controversies</p> <ul style="list-style-type: none"> • Anti-Competitive Behavior Controversies (-1, 0) • Bribery and Corruption Controversies (-1, 0) • Business Ethics Controversies (-1, 0) • Taxes and Subsidies Controversies (-1, 0)

ESG METRICS COVERAGE UNIVERSE

Data consistently available for every company and comparable across:



	Developed Markets	Emerging Markets	Total
Large Cap	733 (8.54%)	443 (5.16%)	1,176 (13.70%)
Mid Cap	917 (10.68%)	389 (4.53%)	1,306 (15.21%)
Small Cap	4,271 (49.75%)	1,832 (21.34%)	6,103 (71.09%)
All	5,921 (68.97%)	2,664 (31.03%)	8,585 (100%)



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