ESG Investing

TRENDS AND APPROACHES

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November 1, 2019
ESG investing is growing dramatically...why now?

UN PRI* Has Grown to Over 1,900 Signatories with $81.7 Trillion In AUM

99% CAGR in ETF AUM Tracking MSCI ESG Indexes since 2013

HERE’S WHY:

1. Investors have become less tolerant of corporate ESG incidents
2. Investors demonstrating willingness to act
3. Greater understanding of potential financial benefit
4. Improved ESG ratings

*United Nations Principles for Responsible Investing
1. Investors have become less tolerant of Corporate ESG incidents

30 years ago, Exxon’s stock price barely moved when Exxon Valdez spilled 11mm gallons of oil on the Alaskan shore.* Today, with social media allowing for immediate, global communication of issues, investors are making companies accountable for their actions.

*Source: https://www.fool.com/investing/general/2014/03/24/25-years-on-from-exxon-valdez-what-weve-learned-wh.aspx; Examples only. Past performance is not indicative of future results, which may differ materially.
2. Greater understanding of potential financial benefit of ESG strategies, and longer track records

A MSCI ESG Research study\(^1\) found that companies with high ESG Ratings had higher profitability, lower tail risk and lower systematic risk on average based on 10 years of data.

Companies with higher MSCI ESG scores had **higher profitability** and were more competitive.

MSCI has a broad range of ESG Indexes with significant live history. More than 120 have five or more years of live history, with MSCI KLD 400 having the longest track record (28+ years).

MSCI KLD 400: **28+ years** of live history

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3. Investors demonstrating willingness to act

More than $250bn allocated to investments tracking / benchmarked to MSCI ESG equity & fixed income indexes since 2014\(^1\)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
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<tbody>
<tr>
<td>AMF</td>
<td>GPIF</td>
<td>CalSTRS</td>
<td>Swiss Re</td>
<td>Migros</td>
<td>Ontario Teachers Pension Fund</td>
<td>The State of Connecticut Retirement Plans &amp; Trust Funds</td>
</tr>
<tr>
<td>MSCI ACWI ESG Leaders policy benchmark</td>
<td>Commenced with 3% of domestic equity MSCI Japan ESG Select Leaders Index + MSCI Japan Empowering Women</td>
<td>Committed $2.5bn to MSCI ACWI Low Carbon Target Index</td>
<td>Proceeded with $130bn active listed equity and credit MSCI ESG Leaders + Bloomberg Barclays MSCI Corporate Sustainability</td>
<td>$4.5bn MSCI ACWI ex China ESG Universal</td>
<td>$130bn MSCI ACWI ex Canada Ex Tobacco policy benchmark</td>
<td>MSCI ACWI Ex Tobacco Ex Controversial Weapons policy benchmark</td>
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<td>UK EAPF</td>
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<td>Taiwan BLF</td>
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<td>Willis Towers Watson</td>
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<td>$400m MSCI World Low Carbon Target Index</td>
<td>$2.4bn MSCI ACWI ESG Factor Mix Index</td>
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<td>$750M MSCI ACWI ex Thermal Coal Adaptive Capped ESG Universal Index</td>
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<td>United Nations Pension Fund MSCI ACWI Ex Canada Ex Tobacco Ex Controversial Weapons policy benchmark</td>
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<td>Targeting 100% of equity portfolio allocation by 2020 MSCI Low Carbon indexes</td>
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<td>United Nations Pension Fund MSCI ACWI Ex Canada Ex Tobacco Ex Controversial Weapons policy benchmark</td>
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<td>The State of Connecticut Retirement Plans &amp; Trust Funds to track MSCI World ESG index</td>
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<td>ESG benchmark indices based on MSCI’s sustainability ratings</td>
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<td>New Zealand Super</td>
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<td>40% of passive equity portfolio MSCI custom Low Carbon Index</td>
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<td>The State of Connecticut Retirement Plans &amp; Trust Funds to track MSCI World ESG index</td>
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</tbody>
</table>

1 Based on publicly available information or press releases published from 2014 to date.
4. Improved ESG ratings now make it possible to measure what was once unmeasurable

Over the last eight years, MSCI has made significant investments in our ESG Ratings.

Our approach focuses on (1) identifying most relevant risks by sector; (2) recording forward-looking management data; and (3) incorporating unique alternative data sources beyond company disclosed (or reported) data.

More alternative data beyond company self-reported data (~45% in our model)

More asset classes and securities covered

Historical ESG Data Coverage in Terms of Market Capitalization within a commonly used Global High Yield Index (USD)


2,434 constituents of the MSCI ACWI Index as of November 30, 2017
Source: MSCI ESG Research
5. The Equifax example illustrates how a proper ESG approach helped identify a material risk.

ESG Ratings for Equifax highlighted key data breach risks more than one year before the breach.

HERE IS WHAT LED TO EQUIFAX’S DOWNGRADE IN AUGUST 2016:


2. Systematic review of forward-looking information (strategy, policies and targets) across sector. EFX was weakest by far.

3. Special focus on performance analysis. EFX was already subject to major hack and did not adapt. Use of alternative data sources (in this case, databases of hacks) allows for more effective assessment compared to company reported data.

MSCI ESG Research downgraded Equifax to “CCC” (lowest possible rating) because of cyber security concerns.

Excluded from MSCI ESG Leaders Index.

Equifax confirms cybersecurity breach, compromising personal information of up to 143 million customers.

CEO, Richard Smith resigns.

Sources: MSCI ESG Research, NY Times 2017
From why to how
ESG leaders have demonstrated increased sophistication across their organizations

Asset Managers are moving beyond fundamental equity and **integrating ESG into fixed income and quantitative strategies with growing sophistication**

**Largest consultants** are **incorporating ESG dimensions into manager selection in reaction to Asset Owner requests**

**Engagement** is becoming an **important tool for improving company performance and returns**

Risk teams are increasingly **systematically reporting** on ESG risk

Demand for active and passive **ESG Funds across asset classes** for total portfolio exposures

<table>
<thead>
<tr>
<th>ASSET OWNERS</th>
<th>CONSULTANTS</th>
<th>ASSET MANAGEMENT</th>
<th>RISK MANAGEMENT</th>
<th>COMPLIANCE</th>
<th>OTHER / PRODUCT</th>
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<tr>
<td>PENSION FUNDS</td>
<td>ESG Mandates</td>
<td>FUNDAMENTAL EQUITY</td>
<td>ESG Integration</td>
<td>Mandates</td>
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<td>Manager Selection</td>
<td>Engagement</td>
<td>ESG Integration</td>
<td>Global Sanctions</td>
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<td>&amp; FOUNDATIONS</td>
<td>Policy benchmark</td>
<td>Low carbon</td>
<td>ESG Themes</td>
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<td>WEALTH MANAGEMENT</td>
<td>Low carbon</td>
<td>FIXED INCOME</td>
<td>ESG Themes</td>
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<td>QUANT</td>
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<td>ESG SPECIALIST</td>
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<td>ACTIVE FUND</td>
<td>Core EQ / FI</td>
<td>RISK MANAGEMENT</td>
<td>ESG Themes</td>
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<td>PASSIVE FUND &amp; ETP</td>
<td>ESG + Factor</td>
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<td>ESG Themes</td>
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<td>Core EQ / FI</td>
<td>RISK MANAGEMENT</td>
<td>ESG Themes</td>
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<td>ESG + Factor</td>
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Asset Managers are moving beyond fundamental equity and integrating ESG into fixed income and quantitative strategies with growing sophistication

**Largest consultants** are incorporating ESG dimensions into manager selection in reaction to Asset Owner requests

Engagement is becoming an important tool for improving company performance and returns

Risk teams are increasingly systematically reporting on ESG risk

Demand for active and passive ESG Funds across asset classes for total portfolio exposures
Integrating ESG across your entire investment process

MSCI can help you:

1. Define objectives & policy
   - Define investment and ESG objectives
   - Set targets and strategies to enhance ESG profile
   - Develop investment policy
   - Select benchmarks

2. Integrate into investment process
   - ESG in portfolio construction
   - Active and index-linked ESG products
   - Scalable risk management reporting
   - Stress testing

3. Engage stakeholders & report
   - Engage companies and external stakeholders
   - Provide transparency through client reporting
Incorporating ESG into investment strategy or creating products typically starts with understanding client objectives, which may combine elements of managing long-term risk, reflecting values and positive impact.

**Investment Objectives**

- **Integration**
  - Financial returns
  - ESG criteria
  - Incorporate ESG criteria to enhance long-term return, manage ESG financial risk

**Individual Objectives**

- **Values**
  - Values & Preferences
  - Financial Returns
  - Align portfolio with investor’s ethical or political values
  - “Our investments should reflect our clients’ values”

- **Impact**
  - Values & Preferences
  - Financial Returns
  - Generate measurable social or environmental benefits as well as financial returns
  - “We want our investments to make a difference in the world”
Define: evaluate & develop approach

A critical step in the process of ESG integration brings clarity on the objectives, the policies that would apply throughout the organization as well as expected outcome. MSCI’s research and tools can assist in developing policy, selecting the right benchmark, measuring expected outcomes and determining strategic positioning.

MSCI ESG Research Provide Guidance on Trends and Best Practices

ESG Fund Metrics Provide an Understanding of Positioning vs Peers
Integrate ESG into your investment strategy

There are numerous approaches for integrating ESG into portfolio construction—whether active or passive strategies—in equities or fixed income. Here are some common approaches.

1. Improve ESG Quality / Reduce Risk
   - MSCI’s ESG Ratings can be used for security selection or within systematic strategies to help improve ESG quality and reduce risk. *Foundations of ESG Investing* illustrate various investment approaches.¹

2. Reduce Carbon Footprint
   - The MSCI Low Carbon Target Index targets an 80% reduction in carbon emissions while maintaining similar characteristics as the parent Index, including a 0.5% tracking error.²

3. Exclude Business Activities
   - Asset owners increasingly require screens on their funds. MSCI offers a full range of screens and thresholds to help managers meet client needs.

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² Beyond Divestment: Using Low Carbon Indexes, MSCI, 2015
Integrate ESG into your risk management

We increasingly see clients incorporating ESG into risk reporting and conversations with portfolio managers.

Sample report used by large fund manager for quarterly risk reporting

Portfolio has a **higher ESG Quality score** than the benchmark

High ESG Quality score coming from **higher exposure to ESG leaders** and lower exposure to laggards

Portfolio has **moderate Carbon Risk (1)** and **very low Reputational Risk (2)**, as well as **4.3% more exposure to Governance Leaders (3)** than the benchmark

Available in MSCI RiskManager, MSCI BarraOne and MSCI Barra Portfolio Manager
Engage with stakeholders and communicate

Many asset owners expect managers to be active stewards of capital and to exert oversight and influence on companies they own. Leaders in field use engagement to improve company performance.

Proxy Voting
Well-informed voting aimed at improving returns

Company Engagement
Direct, constructive dialogue to improve practices

‘Beta Engagement’
Beta engagement aimed at raising market standards
Examples: Proxy Access, Climate Disclosure

As part of Japan’s Government Pension Fund (GPIF) allocation to MSCI ESG Leaders Index mandates, MSCI initiated engagements with Japanese corporates in 2017 to raise awareness of ESG best practices. As a result, we have seen a dramatic increase in interest, measured by an increase in response rates from Japanese companies.

Corporate Inquiries/Feedback from Japanese Companies

Source: MSCI ESG Research
Universe: Japanese companies on MSCI ACWI Index
Corporate Inquiries/Feedback: companies that have inquired about and/or provided feedback on MSCI ESG Research data and analysis
MSCI ESG Ratings

Measuring material ESG risks
ESG RATING METHODOLOGY

1. **Evaluate Corporate Governance**
   - Analysis begins with a deep governance assessment
   - Ownership, Board, Pay, Accounting, Corporate Behavior

2. **Identify Key Issues by Industry**
   - Focus on most material ESG factors by industry
   - Quantitative Approach + Annual Consultation

3. **Score Key Issues (0-10)**
   - Focus on risk exposure not just disclosure
   - Scoring Models Assess Risk Exposure + Risk Management

4. **Final ESG Ratings (AAA-CCC)**
   - Identify leaders and laggards within each industry
   - Industry-Relative ESG Ratings (AAA-CCC)

Sources: MSCI ESG Research
## MSCI ESG RATINGS KEY ISSUES

### Three-Step Process
1. Identify Key Issues By Industry
2. Measure Risk Exposure for each Key Issue
3. Measure Risk Management for each Key Issue

<table>
<thead>
<tr>
<th>ENVIRONMENT PILLAR</th>
<th>SOCIAL PILLAR</th>
<th>GOVERNANCE PILLAR</th>
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</thead>
<tbody>
<tr>
<td>Climate Change</td>
<td>Human Capital</td>
<td>Corporate Governance</td>
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<tr>
<td>Natural Capital</td>
<td>Product Liability</td>
<td>Corporate Behavior</td>
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<tr>
<td>Pollution &amp; Waste</td>
<td>Stakeholder Opposition</td>
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<tr>
<td>Env. Opportunities</td>
<td>Social Opportunities</td>
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<tr>
<td>Carbon Emissions</td>
<td>Labor Management</td>
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<td>Water Stress</td>
<td>Product Safety &amp; Quality</td>
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<td>Toxic Emissions &amp; Waste</td>
<td>Controversial Sourcing</td>
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<td>Clean Tech</td>
<td>Access to Communication</td>
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<td>Product Carbon Footprint</td>
<td>Health &amp; Safety</td>
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<td>Pay</td>
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<td>Anti-Competitive Practices</td>
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<td>Supply Chain Labor Standards</td>
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<td>Responsible Investment</td>
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<td>Insuring Health &amp; Demographic Risk</td>
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<td>Opportunities in Nutrition &amp; Health</td>
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<td>Accounting</td>
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- **Corporate Governance**
  - Board
  - Business Ethics

- **Corporate Behavior**
  - Pay
  - Anti-Competitive Practices
  - Responsible Investment
  - Insuring Health & Demographic Risk

- **Environmental Pillar**
  - Climate Change
  - Natural Capital
  - Pollution & Waste
  - Env. Opportunities

- **Social Pillar**
  - Human Capital
  - Product Liability
  - Stakeholder Opposition
  - Social Opportunities

- **Governance Pillar**
  - Corporate Governance
  - Corporate Behavior

- **Three-Step Process**
  1. Identify Key Issues By Industry
  2. Measure Risk Exposure for each Key Issue
  3. Measure Risk Management for each Key Issue
DETERMINING KEY ISSUES:
E.g. Water Risk by Sub-Industry

Water Intensity Data Sources: Company data from MSCI ESG Research, IERS Comprehensive Environmental Data Archive, Canadian Industrial Water Survey
MEASURING
ESG RISK EXPOSURE

- Type of operations
- Location of operations
- Size of operation, etc

- Policies & commitments
- Programs & initiatives
- Performance indicators
  - Controversies
ASSESSING RISK EXPOSURE

Example:

Kaz Minerals

<table>
<thead>
<tr>
<th>MINE NAME:</th>
<th>Aktogay</th>
<th>Bozshakol</th>
<th>Bozymchak</th>
<th>East Region Operations</th>
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<tbody>
<tr>
<td>% of Operations</td>
<td>29%</td>
<td>11%</td>
<td>2%</td>
<td>57%</td>
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<table>
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<th>Kazakhstan Pavlodar</th>
<th>Kazakhstan Aral</th>
<th>Kazakhstan Ob</th>
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<tr>
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<td>SEVERE</td>
<td>MEDIUM</td>
<td>SEVERE</td>
<td>LOW</td>
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<th>Copper</th>
<th>Copper</th>
<th>Gold</th>
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<tr>
<td>WATER INTENSITY</td>
<td>HIGH 5.99</td>
<td>HIGH 5.99</td>
<td>HIGH 6.03</td>
<td>HIGH 6.07</td>
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Iluka Resources

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<tr>
<th>MINE NAME:</th>
<th>Eucla</th>
<th>Murray</th>
<th>Perth</th>
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<tr>
<td>% of Operations</td>
<td>34%</td>
<td>20%</td>
<td>44%</td>
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<td>SEVERE</td>
<td>MEDIUM</td>
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ASSESSING RISK MANAGEMENT

The focus is not only on policies and practices but also on evidence of actions

<table>
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<tr>
<th>Factor</th>
<th>Score</th>
<th>Practices</th>
<th>Performance</th>
<th>Controversies</th>
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<tbody>
<tr>
<td>Company A</td>
<td>3.2</td>
<td>5.2</td>
<td>1.8</td>
<td>-0.3</td>
</tr>
<tr>
<td>Company B</td>
<td>7.0</td>
<td>7.9</td>
<td>6.1</td>
<td>n/a</td>
</tr>
</tbody>
</table>

- **Practices Score (0-10)**
- **Performance Score (0-10)**
- **Controversies Deduction (-5 – 0)**

Scope & strength of policies
Senior oversight
Strength of reduction targets
Programs to reduce impact & dependence
Company’s performance trend
Intensity vs industry
Recycling rates
Company’s response to events
Powering better investment decisions

MSCI can help you integrate ESG into your investment process and communicate with your stakeholders using the common language of ESG Ratings:

1. **Leading ESG Ratings & Research**
   - Broad coverage with more than 13,000 entities, >90% of equity and FI MV

2. **Innovative equity & fixed income indexes for various ESG approaches**
   - More than 900 indexes covering integration, values and impact

3. **Market-leading risk analytics platform & ESG reporting**
   - Sophisticated ESG Analytics and scalable reporting across 700,000 multi-asset class securities

4. **ESG expertise & network**
   - 350+ ESG experts and over 600 individuals working with investors around the world
About MSCI

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