MSCI

Integrating ESG and Climate into Portfolios



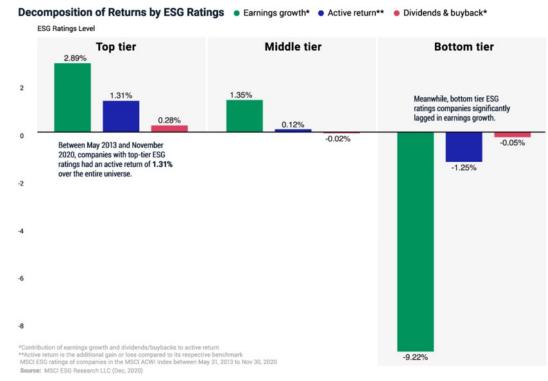
ESG Factors Have Improved Equity Returns...

While the perception that ESG principles hinder equity performance may linger in places, considerable data shows the opposite.

For example, ESG leaders showed resilience before and during the global pandemic. Worldwide, ESG-focused companies have not only seen higher returns, but stronger earnings growth and dividends.

Tools and Resources How Have Stocks Responded to Changes in Climate Policy? The Truth Behind 5 ESG Myths Foundations of climate Investing

Dispelling the myth that ESG comes at the expense of performance





... and Improved The Risk Return Profile of Bond Portfolios

Institutional investors made significant progress in incorporating ESG factors into their bond portfolios. Similar dynamics are now impacting retail portfolios and funds. ESG ratings had characteristics distinct from credit ratings and delivered financial value after accounting for credit ratings. The two types of rating systems complemented each other.

MSCI's analysis found that higher-ESG-rated bond portfolios realized higher risk-adjusted returns. They also exhibited significantly lower drawdowns, reflecting the defensive characteristics of an ESG bond strategy.

Tools and Resources

Can Green Spreads Uncover ESG's Influence on Bond Prices?
What ESG Ratings Tell Us About Corporate Bonds

Issuers from High-ESG-Score Tercile Had More Resilient Excess Returns

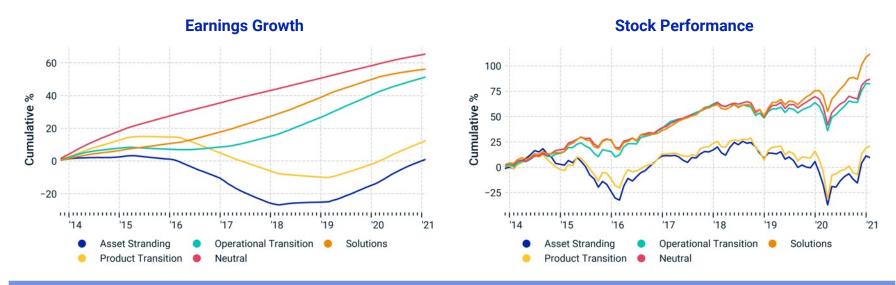




Financial Differences Between Greenhouse Gas Leaders and Laggards Can Be Significant

MSCI research has shown that higher carbon intensity leads to lower valuations, higher capital costs and a negative impact on stock price.

This impact is concentrated in the most carbon-intensive companies.



Equal-weighted low carbon transition categories within MSCI ACWI IMI



Building an ESG Framework

ESG ratings provide a consistent framework to facilitate comparative decisions. This consistency is the foundation of security analysis and subsequent ESGdriven portfolio construction.

It enables decisions based on factors that go deeper than corporate statements on ESG intent. Experience has shown that these statements have, on occasion, been misaligned from ESG reality (often referred to as "greenwashing.") Advanced technology, including artificial intelligence, will further reduce reliance on voluntary disclosures from companies.

Tools and Resources



ESG Fund Ratings Search Tool for 8500+ companies

ESG and Climate Funds in Focus

ESG Indexes

Understanding MSCI Climate Indexes



DATA

1,000+ data points on ESG policies, programs, and performance; Data on 100,000 individual directors; up to 20 years of shareholder meeting



MANAGEMENT METRICS **EXPOSURE METRICS**

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

How is the company managing

each material issue? 150 policy/program metrics, 20 performance metrics; 100+ Governance Key Metrics.



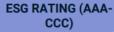
100+ specialized datasets (government, NGO, models)

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

3,400+ media sources monitored daily (global and local news sources, governments, NGOs)

KEY ISSUE SCORES & WEIGHTS

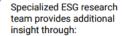
35 Key Issues selected annually for each industry and weighted based on MSCI's materiality mapping framework.



Issue scores and weight combine to overall ESG rating relative to industry peers. Individual E. S. G scores

so available

INSIGHT



Company reports **Industry reports** Thematic reports Analyst calls & webinars

DATA OUTPUTS



Access to selected underlying data Ratings, scores, and weights on 680,000 securities

17 years of history

MONITORING & **OUALITY REVIEW**

Systematic, ongoing daily monitoring of controversies and governance events

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



MSCI's Ratings Methodology





ESG risks and opportunities can vary by industry and company. Our MSCI ESG Ratings model identifies the ESG risks, (what we call Key Issues), that are most material to a GICS® subindustry or sector.

MSCI's ESG ratings measure a company's resilience to financially material environmental, societal and governance risks. While not a general measure of corporate "goodness" or a barometer on any single issue they provide a window into a critical facet of risk to financial performance.

With over 13 years of live track history we have been able to examine and refine our model to identify the E, S, and G Key Issues which are most material to an industry.

Tools and Resources

- Inside ESG Ratings: How Companies Are Scored
- What are ESG Fund Ratings?
 - Climate Matters: What's in an ESG Rating. And What's Not.

CCC В AA AAA BB **BBB LAGGARD AVERAGE LEADER** A company lagging its industry based A company with a mixed or unexceptional track record of A company leading its industry in managing the most significant ESG risks and opportunities on its high exposure and failure to managing the most significant ESG manage significant ESG risks relative to industry peers risks and opportunities



MSCI's Ratings Methodology



We assess thousands of data points across 35 ESG Key Issues for more than 8,500¹ companies globally. MSCI focuses on the intersection between a company's core business and the industry-specific issues that may create significant risks and opportunities.

The Key Issues are weighted according to impact and time horizon of the risk or opportunity. Corporate Governance and Corporate Behavior are typically broadly applied while environmental and social factors can vary significantly by industry.

Tools and Resources	
MSCI's ESG Ratings	

MSCI ESG Score										
Environment Pillar			Social Pillar				Governance Pillar			
Climate Change	Natural Capital	Pollution & Waste	Env. Opportunities	Human Capital	Product Liability	Stakeholder Opposition	Social Opportunities	Corporate Governance	Corporate Behavior	
Carbon Emissions	Water Stress	Toxic Emissions & Waste	Clean Tech	Labor Management	Product Safety & Quality	Controversial Sourcing	Access to Communication	Board	Business Ethics	
Product Carbon Footprint	Biodiversity & Land Use	Packaging Material & Waste	Green Building	Health & Safety	Chemical Safety	Community Relations	Access to Finance	Pay	Tax Transparency	
Financing Environmental Impact	Raw Material Sourcing	Electronic Waste	Renewable Energy	Human Capital Development	Consumer Financial Protection		Access to Health Care	Ownership		
Climate Change Vulnerability				Supply Chain Labor Standards	Privacy & Data Security		Opportunities in Nutrition & Health	Accounting		
					Responsible Investment					
Key Issues selected for the Soft Drinks Sub Industry (e.g. Coca Cola)					Insuring Health & Demographic Risk		Universal Key	Issues applicable	to all industrie	



¹As of October 2020

Ratings in Practice: ESG and Working Conditions

Safety protocols are a key sustainability issue for the industrial sector. Here's how two companies compare. Investors can choose to support companies that take greater lengths to protect their workers.







Source: MSCI ESG Research (Dec, 2020)



In Practice: Implied Temperature Rise (ITR)

What does it measure?

The Implied Temperature Rise (ITR) metric provides an indication of how well public companies align with global temperature goals

Expressed in degrees Celsius, it is an intuitive, forward-looking metric that shows how a company aligns with the ambitions of the Paris Agreement

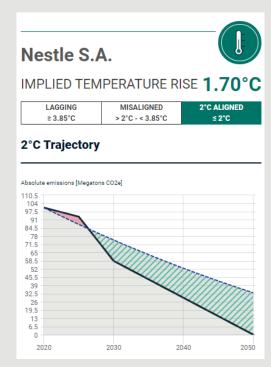
It covers companies' Scope 1, 2 and 3 carbon emissions (may include estimates)

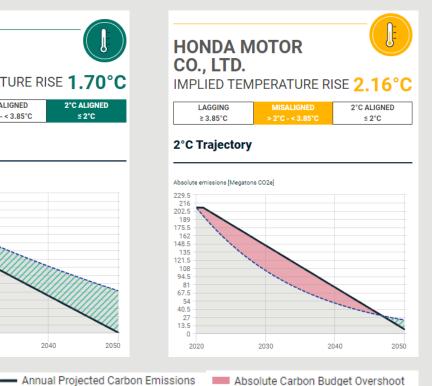
Based on data that can be easily examined and traced, together with analysis of companies' decarbonization targets

Tools and Resources

What Implied Temperature Rise Means for Funds The Implied Temperature Rise of 'Paris-Aligned' Indexes

ESG Ratings and ITR Search Tool





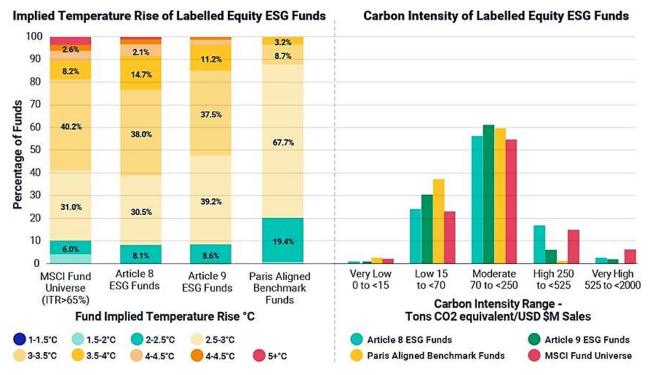
MSCI 2°C Trajectory (Annual Budget) MSCI 2°C Trajectory (Annual Budget) MSCI 2°C Trajectory (Annual Budget)



In Practice: Sustainable Fund Selection

Wealth managers are increasingly integrating climate considerations into fund selection and portfolio construction. Data points such as Fund Implied temperature rise can be used to filter the universe in this regard.

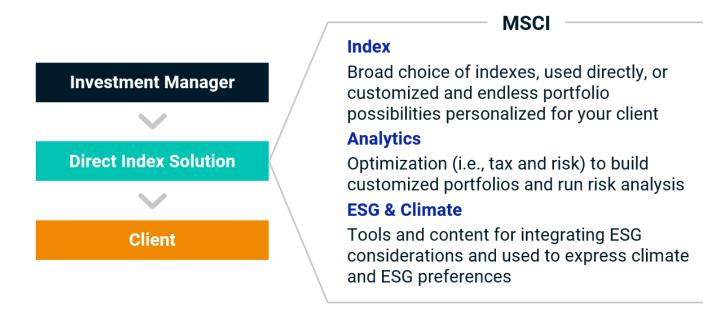






In Practice: Direct Indexing

Investors can customize any one of the MSCI Indexes suite to better align a client's portfolio with their climate preferences, lower risk and reduced tax burden.





Notice and Disclaimer: ESG

This document and all of the information contained in it, including without limitation all lext, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information are reserved by MSCI and/or its Information Providers") and is provided for informational purposes only. The Information are reserved by MSCI and/or its Information Providers.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the neclioence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results,

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com.

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials. including materials utilized in any MSCI ESG Indexes or other products. have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard & Poor's."

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.

Privacy notice; For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at https://www.msci.com/privacy-pledge.



About MSCI: ESG

About MSCI ESG Research Products and Services

MSCI ESG Research products and services are provided by MSCI ESG Research LLC, and are designed to provide in-depth research, ratings and analysis of environmental, social and governance-related business practices to companies worldwide. ESG ratings, data and analysis from MSCI ESG Research LLC. are also used in the construction of the MSCI ESG Indexes. MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc.

About MSCI Inc.

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit www.msci.com.

