Powering better investment decisions for a more sustainable future

MSCI ESG Research, Indexes and Analytics*
ESG investing is growing exponentially as investors increasingly integrate ESG and financial objectives in the investment decision-making process.

Between 2016 and 2018, global assets managed using responsible investment strategies have risen by 34% from USD $22.9 trillion to over $30.7 trillion, globally¹.

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**ESG investing**

We define ESG investing as the consideration of environmental, social and governance factors alongside financial factors in the investment decision-making process.

ESG investing is a term that is often used synonymously with sustainable investing, impact investing, purpose-driven investing, socially responsible investing, or screening.

Visit ESG101.com to learn more

¹ The Global Sustainable Investment Alliance 2018 – April, 2019 http://www.gsi-alliance.org/
We attribute the growth to three key drivers:

1. The world is changing

Global challenges — such as flood risk and extreme weather events, privacy and data security, demographic shifts and regulatory pressures — represent new or accelerating risks for investors. While companies face an ever more toxic cocktail of threats, their investors are less tolerant of ESG incidents and may look to re-evaluate traditional investment approaches.
Data and analytics are evolving

Over the next two to three decades, the millennial generation is expected to direct between $15 trillion and $20 trillion into U.S.-domiciled ESG investments, roughly twice the value of the U.S. equity market\(^2\). A growing body of research suggests that millennials are asking more of their investments.

Advanced technology, including artificial intelligence and machine learning, combined with better data from companies, is facilitating better ESG research and analytics and enabling more systematic, quantitative, objective and financially relevant approaches to ESG investing.

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Why work with MSCI and MSCI ESG Research?

Unique insights to power better investment decisions

As ESG investing has escalated, so has the need for reliable data. ESG reporting by companies globally can be limited and lack standardization. MSCI ESG Research leverages alternative datasets to provide unique insights on companies’ ESG risk exposure and performance.

MSCI ESG Research continuously monitors ESG issues and employs AI technology in new ways to empower your investment decisions.

Alternative data is a significant input to ESG Ratings model

2,434 constituents of the MSCI ACWI Index as of November 30, 2017. Source: MSCI ESG Research
ESG and performance

How has ESG affected equity valuation, risk and performance?

MSCI’s Foundations of ESG Investing study (published in the Journal of Portfolio Management, July 2019) found companies with high MSCI ESG Ratings had higher profitability, lower tail risk and lower systematic risk on average based on 10 years of data. The study also found companies with the lowest MSCI ESG Ratings were three times more likely to have experienced drawdowns over the previous 10 years.

Actionable solutions to support ESG integration

MSCI ESG Research provides the content, flexible technology and team of experts to help investors evaluate ESG risks and opportunities across all aspects of the investment process – from defining investment policy and selecting benchmarks to research, portfolio construction and risk management, engagement and reporting.

By listening to, and collecting insights from our global network of more than 1,300 clients, we aim to develop solutions to address their current and emerging business challenges.

Common language used by investors

Leading asset owners, consultants and wealth management fund selection teams have selected MSCI and MSCI ESG Research to provide them with products and services to better inform their decisions around awarding mandates, selecting managers, buying funds and measuring ESG performance.

Asset Managers can use MSCI ESG Ratings and MSCI ESG Indexes5 to enhance their investment decision making process and facilitate communication on ESG performance with other market participants.

4 Clients of MSCI ESG Research LLC.
5 MSCI ESG Indexes and MSCI Analytics utilize information from, but are not provided by, MSCI ESG Research LLC. MSCI Equity Indexes are products of MSCI Inc. and are administered by MSCI UK Limited.
Our ESG solutions

MSCI and MSCI ESG Research bring transparency to environmental, social and governance risks and opportunities for our clients worldwide.

MSCI delivers ESG indexes and analytics, and MSCI ESG Research delivers ratings, research and metrics, to help investors navigate increasing regulation, meet new client demands and assess risk and opportunity.

Asset owners, asset managers, wealth managers and banks integrate our ESG solutions into their investment strategy processes and stakeholder reporting in multiple ways:

MSCI ESG Indexes are designed for use by investors seeking to reduce exposure to systematic and stock-specific risks and set benchmarks for integrating ESG into active and passive portfolios.

Learn more about MSCI ESG Indexes on msci.com/esg-indexes.

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* As of Mar 2019 from Bloomberg; defined as each share class of an exchange traded fund, as identified by a separate BBG ticker. Only primary listings, and not cross listings, are counted. MSCI does not guarantee the accuracy of third party data.

6 MSCI ESG Indexes and MSCI Analytics utilize information from, but are not provided by, MSCI ESG Research LLC. MSCI Equity Indexes are products of MSCI Inc. and are administered by MSCI UK Limited.
MSCI ESG Research provides ratings of companies and mutual funds/ETFs to provide greater transparency and scrutiny of corporate practices for institutional investors seeking to avoid controversies and mitigate risk. Learn more about MSCI ESG Ratings and MSCI ESG Fund Ratings. Visit msci.com/esg-ratings and msci.com/esg-fund-ratings.

**How ESG Ratings work**

1. Analysis begins with a deep governance assessment
2. Focus on most relevant ESG factors by industry
3. Focus on risk exposure, not just disclosure
4. Identify leaders and laggards, not excluding by business type

**MSCI ESG Ratings**

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MSCI ESG Analytics enables investors to gain deeper insight beyond traditional financial factors that may affect long-term value creation. Investors can interrogate ESG data and indexes in MSCI Beon to support portfolio construction, risk and performance attribution, and monitoring and reporting.

Learn more about ESG on MSCI Beon on msci.com/esg-analytics.

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7 Provided by MSCI ESG Research LLC
8 Provided by MSCI Inc.
ESG solutions enable you to build stronger portfolios.
ESG Framework

Incorporating ESG into your investment strategy or product development typically starts with understanding your ESG objectives. We have organized our solutions into three categories:

**Integration**
These solutions aim to incorporate ESG to enhance long term return and manage ESG financial risk

**Values**
These solutions aim to align with ethical or political values or meet compliance requirements

**Impact**
These solutions aim to generate measurable social and environmental benefits as well as financial returns

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**MSCI ESG Research**
- ESG Ratings
- ESG Fund Ratings

**MSCI ESG Indexes (Broad indexes)**
- ESG Leaders
- ESG Focus
- ESG Universal
- ESG Select
- Business Involvement Screening
- Controversies
- Norms Screening
- SRI
- ESG Screened
- KLD 400 Social
- Global Environment
- Sustainable Impact
- Women's Leadership

**MSCI ESG Indexes (Thematic indexes)**
- Governance Quality
- Climate Change Indexes
- Low Carbon Leaders
- Low Carbon Target
- Ex Tobacco Involvement
- Ex Controversial Weapons
- Ex Coal
- Ex Fossil Fuels
- Catholic Values
- Islamic

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[msci.com](http://msci.com)
ESG across your investment process

MSCI and MSCI ESG Research products and services are designed to help you in these areas:

### Defining policy & benchmarks

Differentiated ratings and data© to help you:

- define your investment and ESG objectives
- set targets and strategies to enhance the ESG profile of investments
- develop your investment policy
- select policy or performance benchmarks

### Actionable solutions: integrating ESG

Flexible technology to enable you to:

- use ESG quality scores© and ESG risks to inform asset allocation
- identify ESG leaders and laggards for portfolio construction purposes
- develop active and index-linked ESG products¹¹
Growing demand for transparency is driving ESG integration across the investment process. MSCI ESG Research’s aim is to help you integrate ESG in a way that suits your investment approach and strategic objectives, and aligns with the demands of your clients.

Our global client service team is available 24/5 to support you at each step of the investment process.

Company analysis

› identify stocks impacting your portfolio’s ESG profile
› evaluate the ESG scores\(^9\) of your portfolio by sector, region and asset class
› examine ESG performance alongside financial performance

Risk management, reporting & engagement

Access ESG\(^{10}\) in our analytical systems to:

› provide greater transparency of key ESG risks
› support stress testing, and risk and performance attribution analysis
› make forward-looking assessments to identify ESG and reputational risks
› conduct TCFD stress testing to support climate goals
› support corporate dialogue and engagement

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9 Ratings, research and metrics provided MSCI ESG Research LLC.
10 MSCI ESG Indexes and MSCI Analytics utilize information from, but are not provided by, MSCI ESG Research LLC.
MSCI Equity Indexes are products of MSCI Inc. and are administered by MSCI UK Limited. ESG Indexes provided by MSCI Inc.
Our value

___ working with clients

**Risk manager**

**Client use case**
A multinational investment bank and financial services company analyzed carbon footprinting and climate risk management across all portfolios to inform quantitative portfolio construction and client reporting.

**ESG solutions used**
MSCI ESG Analytics, MSCI Climate Change Solutions

**European insurance company**

**Client use case**
Switched its actively managed global equity and credit portfolios to ESG benchmarks.

**ESG solutions used**
MSCI ESG Leaders Index, Bloomberg Barclays MSCI ESG Corporate Sustainability Indexes

**Global asset manager**

**Client use case**
Incorporated ESG criteria across its entire investment process with the aim of enhancing long-term returns and managing financial ESG risks for their clients.

**ESG solutions used**
MSCI ESG Ratings, MSCI ESG Leaders Index (as a performance benchmark)
A selection of recent peer reviewed journal articles and client research using MSCI ESG Ratings (provided by MSCI ESG Research) and MSCI ESG Indexes:

» JP Morgan 2019: Does an ESG tilt improve corporate bond portfolio outcomes?
» Barclays 2018 & 2016: The positive impact of ESG investing on bond performance
» JP Morgan 2018: Systematically investing in ESG themes within the USD high yield corporate bond market
» AQR 2017: Assessing risk through ESG exposures
» Nordea 2017: Cracking the ESG code
» JP Morgan 2016: A quantitative perspective of how ESG can enhance your portfolio

11 MSCI ESG Indexes and MSCI Analytics utilize information from, but are not provided by, MSCI ESG Research LLC. MSCI Equity Indexes are products of MSCI Inc. and are administered by MSCI UK Limited. ESG Indexes provided by MSCI Inc. msci.com 15
Our goal is to set the standard for solving real-world investment challenges.

MSCI takes a long view on ESG. We have invested extensively to expand and improve our ESG solutions, keeping them in step with investors’ evolving needs.
We understand the value of listening to your needs to refine and expand our solutions:

**Technology enabled**
MSCI ESG Research uses artificial intelligence and machine learning, natural language processing and satellite data to give you an in-depth assessment of companies’ ESG practices. The analysts do not rely entirely on corporate disclosure; on average, 45% of the data that informs our ESG Ratings model is sourced from alternative global datasets.

**Consultation & innovation**
MSCI ESG Research is constantly evaluating new datasets, monitoring emerging ESG issues and exploring new technologies to improve our research process and the value for clients. Over the last seven years, MSCI ESG Research has consulted more than 55 investors globally managing approximately $25 trillion in AUM, to refine methodologies and expand our coverage and solutions.

**Flexibility to customise your offering**
MSCI is creating open architecture systems to help you and your third party providers understand ESG risks and opportunities in greater detail. MSCI is modulizing its ESG services to meet your needs.

**Transparency & reporting**
In Q4 2019, MSCI ESG Research is publishing the MSCI ESG Ratings of MSCI ACWI on msci.com to provide greater access and understanding of ESG characteristics. We understand reliable ESG reporting is important to you and your clients, which is why we are making more ESG data available in our analytics systems and have launched an API for you and third party providers.

**Dedicated issuer communications**
MSCI ESG Research’s global issuer team works with corporations to oversee data verification and educate them on our methodology, to encourage greater transparency, disclosure and standardized reporting practices.

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**Why work with us**
For over 40 years MSCI ESG Research LLC has measured and modelled corporate ESG performance. In 1990, MSCI Inc. created our first suite of ESG indexes.

**Unrivalled experience**
For over 40 years, MSCI ESG Research has measured and modelled ESG performance.

**World class research**
Award-winning research team from diverse professional backgrounds including experts in portfolio construction, index construction and understanding equity markets and multi-asset class risk.

**Seamless technology**
Ratings, Research (provided by MSCI ESG Research LLC) and indexes and analytical tools (provided by MSCI Inc.) are developed in-house and designed for seamless integration.

**Global coverage**
Extensive global coverage of more than 13,500 issuers, >90% of equity and fixed income market value. Expanding into other asset classes.

**Gold standard methods**
MSCI ESG Research’s global client service team helps clients integrate our “Gold Standard” accredited research.

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12 Ratings, research and metrics provided MSCI ESG Research LLC.
13 Provided by MSCI ESG Research LLC.
14 Through our legacy companies KLD, Innovest, IRRC, and GMI Ratings.
15 MSCI ESG Ratings coverage dates to 2008.
16 MSCI ESG Indexes and MSCI Analytics utilize information from, but are not provided by, MSCI ESG Research LLC. MSCI Equity Indexes are products of MSCI Inc. and are administered by MSCI UK Limited. ESG Indexes provided by MSCI Inc.
17 Deep Data Delivery Standard http://www.deepdata.ai/
MSCI ESG Research LLC has been recognized as a “Gold Standard data provider” for leading ESG Ratings and Research. MSCI Inc. has been voted “Best Firm for SRI Research”, “Best Firm for Corporate Governance Research” and Best firm for Indices (2015, 2016, 2017, 2018/19.)

Equity & Fixed Income Indexes for various ESG approaches by MSCI Inc. and MSCI UK Limited.

Over 1,000 indexes covering integration, values and impact

- ESG Leaders, ESG Universal, ESG Focus, SRI Indexes and ESG Screened Indexes
- MSCI Climate Indexes
- KLD 400 Index
- Bloomberg Barclays MSCI Global Green Bond Index

18. Ratings, research and metrics provided MSCI ESG Research LLC.
21. Provided by MSCI Inc.
22. Provided by MSCI ESG Research LLC.
Market leading risk analytics systems and ESG reporting

MSCI Beon: Sophisticated ESG analytics and scalable reporting to measure, monitor and manage ESG exposures across 650,000 multi-asset class securities.

› Streamline ESG risk management processes within existing workflows using high volume ESG reporting
› Construct/optimize portfolios
› Report to clients

ESG expertise and network

300+ ESG experts²³ working with asset owners, consultants, asset managers and wealth managers around the world.

²³ MSCI ESG Research as of July 2019. Includes full time employees, employees of foreign affiliates providing investment advisory services to MSCI ESG Research LLC, and global allocated staff performing non-investment advisory tasks.
MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 45 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/esg-investing.