

ESG Investing

FOR ASSET OWNERS WHO SEEK TO INTEGRATE ESG

Chris Tse, *CFA, CIPM, CAIA, FRM, PRM*

Head of Asset Owner Coverage, Greater China

26 November 2019

How to implement ESG

ESG leaders have demonstrated increased sophistication across their organizations

ASSET OWNERS

PENSION FUNDS <ul style="list-style-type: none"> ESG Mandates Manager Selection & Monitoring Policy benchmark Engagement 	CONSULTANTS <ul style="list-style-type: none"> RFP Fund selection OCIO solutions
---	--

INSURANCE <ul style="list-style-type: none"> Manager Selection Policy benchmark Low carbon Tobacco 	ENDOWMENTS & FOUNDATIONS <ul style="list-style-type: none"> Fund Selection Fossil divestment Impact investing
---	---

WEALTH MANAGEMENT

CIO OFFICE <ul style="list-style-type: none"> Model portfolios ESG themes Fund Profile Philanthropy 	FUND SELECTION <ul style="list-style-type: none"> Due Diligence Fund Selection / Peer Analysis Screening
--	--

FINANCIAL ADVISORS <ul style="list-style-type: none"> Portfolio Analysis & Reporting Stock and Fund Research 	RETAIL <ul style="list-style-type: none"> Robo Stock and Fund Research
---	---

ASSET MANAGEMENT

FUNDAMENTAL EQUITY <ul style="list-style-type: none"> ESG Integration Engagement Low carbon Compliance 	FUNDAMENTAL FIXED INCOME <ul style="list-style-type: none"> Corp. Credit EMD credit Green bonds 	QUANT <ul style="list-style-type: none"> ESG Integration ESG solutions ESG + Factors Low carbon
---	---	--

ESG SPECIALIST <ul style="list-style-type: none"> ESG Themes Engagement 	STEWARDSHIP & GOVERNANCE <ul style="list-style-type: none"> Active Ownership Engagement ESG Themes
--	--

RISK MANAGEMENT

RISK MANAGEMENT <ul style="list-style-type: none"> Risk monitoring Risk Reporting TCFD stress test 	COMPLIANCE <ul style="list-style-type: none"> Mandates Global Sanctions
--	--

OTHER / PRODUCT

EMERGING <ul style="list-style-type: none"> Custodian Hedge Fund 	ACTIVE FUND <ul style="list-style-type: none"> Core EQ / FI ESG + Factor Thematic 	PASSIVE FUND & ETP <ul style="list-style-type: none"> Core EQ / FI ESG + Factor Thematic
---	---	--

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

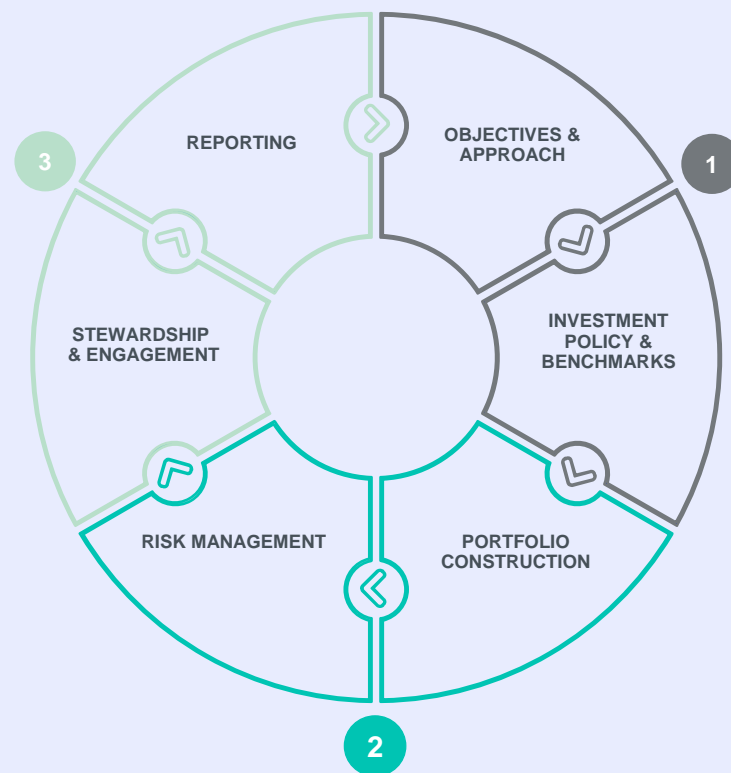
Risk teams are increasingly **systematically reporting** on ESG risk

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



Define: objectives & policy

1 2 3

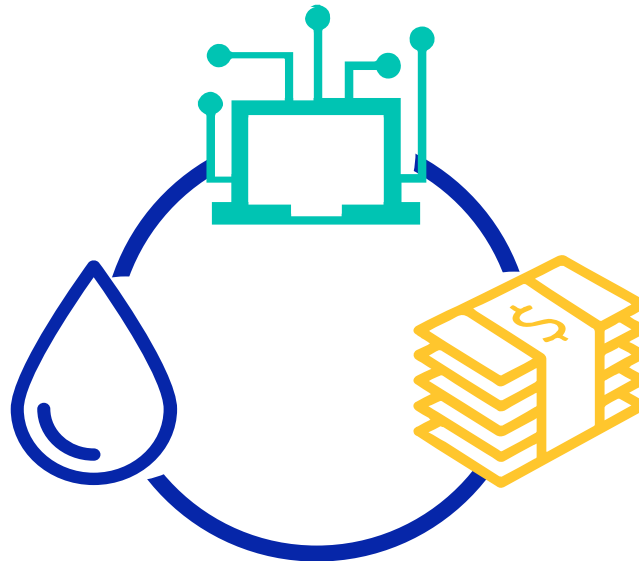
ESG integration can be used by asset owners as a mechanism to manage the long-term risk & return drivers of their portfolios and influence corporate behavior.

SYSTEM IMPROVEMENTS

- Incentive to protect stakeholders interest
- Stewardship of capital
- Overvalued assets

LONG-TERM RISKS

- Climate change
- Societal change
- Technological change



LONG-TERM OPPORTUNITIES

- Proactive capital allocation
- Long term economic growth

Define: assess your needs, define your objectives

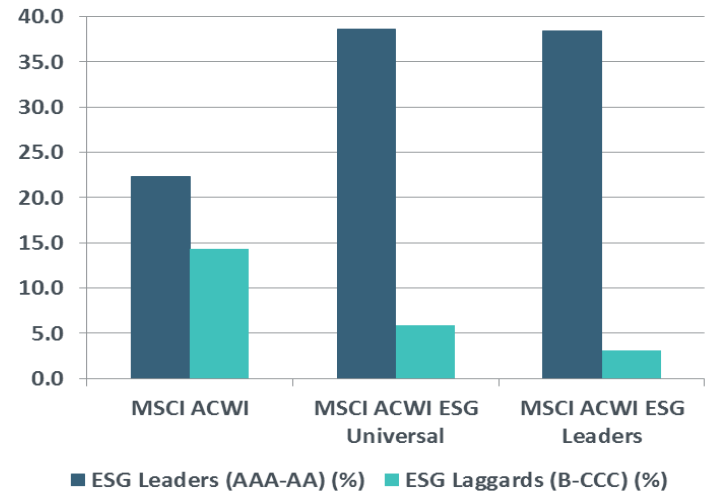
Articulating the objectives, policies and expected outcomes is a critical step in the process of ESG integration. MSCI's research, tools and analysis can assist in assessing your needs.

MSCI ESG Research Provide Guidance on Trends and Best Practices



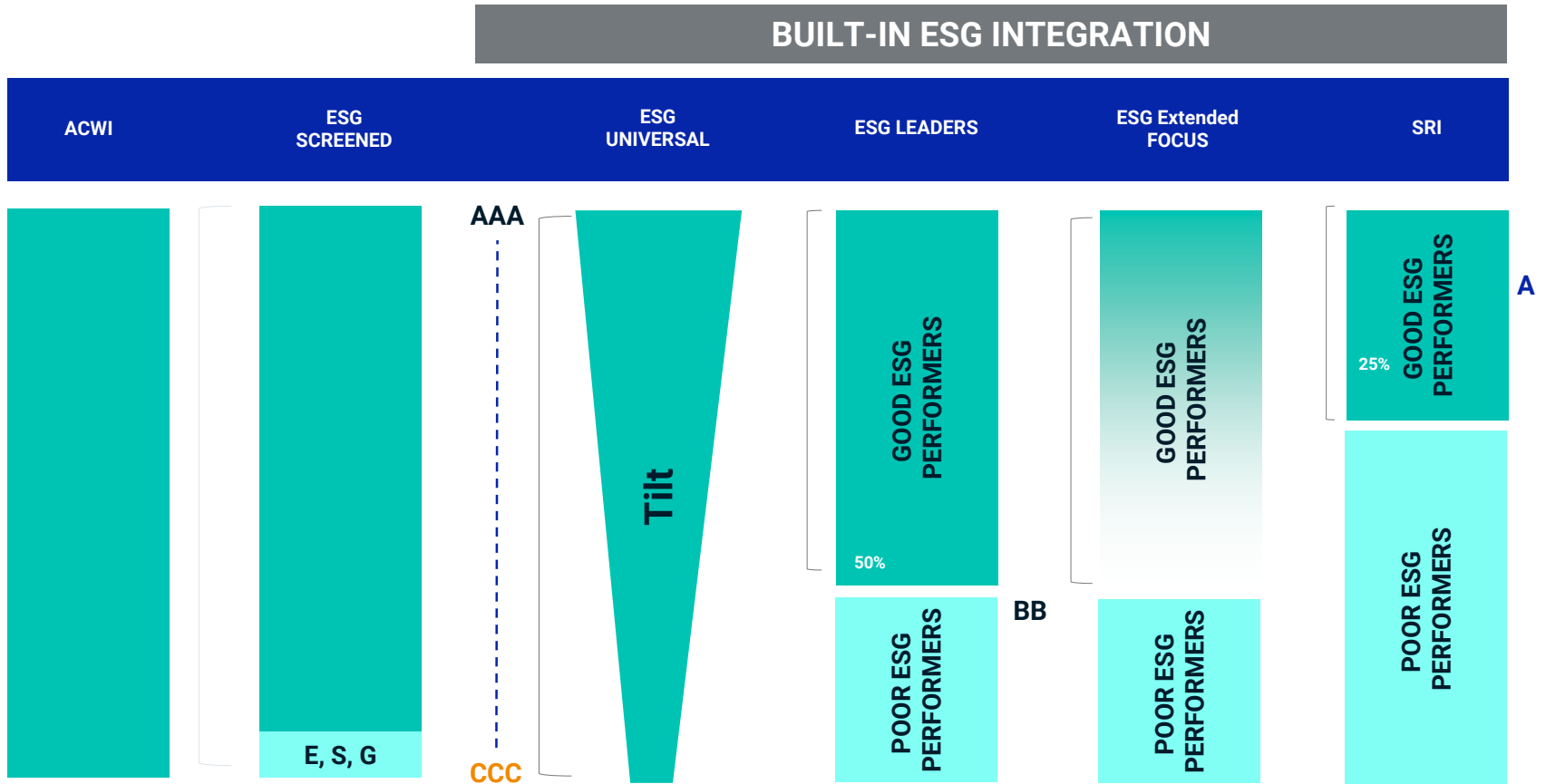
Portfolio & Index Metrics Reports Assess Potential Impact of ESG Approaches

Exposure to ESG leaders and laggards



Define: select a benchmark

Select a benchmark aligned with your ESG investment objectives, and to help you assess managers.



Integrate ESG into your investment strategy

1 2 3

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

ESG



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

CO₂



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

VALUES



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

Integrate ESG indexes as building blocks

ESG Indexes can be used as building blocks for passive, factor and active mandates, across equity and fixed income.

- Available across equity and fixed income
- Available for all regions, countries and sectors
- Universe, opportunity set
- For strategic asset allocation purposes
- Basis for regional, sectorial or style allocations
- Financial product creation
- Performance benchmarks

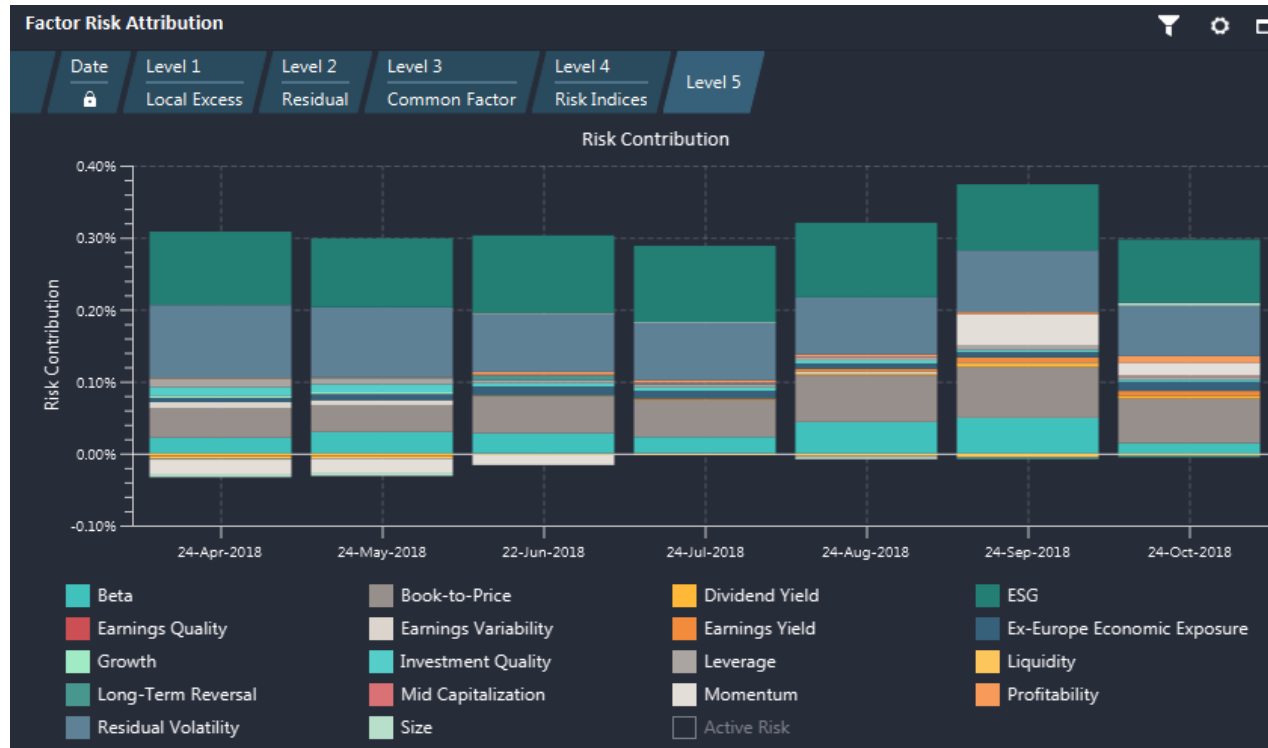
CLASSIC EQUITY ALLOCATION BEFORE ESG INTEGRATION

POLICY BENCHMARK: ACWI IMI				
PASSIVE MANDATES	FACTOR MANDATES		ACTIVE MANDATES	
ACWI IMI	VAL	VOL	AM1	AM2
	SZE	QTY	AM3	AM4
	MO	YLD	AM7	AM8
			AM9	AM10

POLICY BENCHMARK: ACWI IMI				
PASSIVE MANDATES	FACTOR MANDATES		ACTIVE MANDATES	
ACWI IMI ESG UNIVERSAL	VAL + ESG	VOL + ESG	AM1 + ESG	AM2 + ESG
	SZE + ESG	QTY + ESG	AM3 + ESG	AM4 + ESG
	MO + ESG	YLD + ESG	AM7 + ESG	AM8 + ESG
			AM9 + ESG	AM10 + ESG

Integrate ESG into risk management

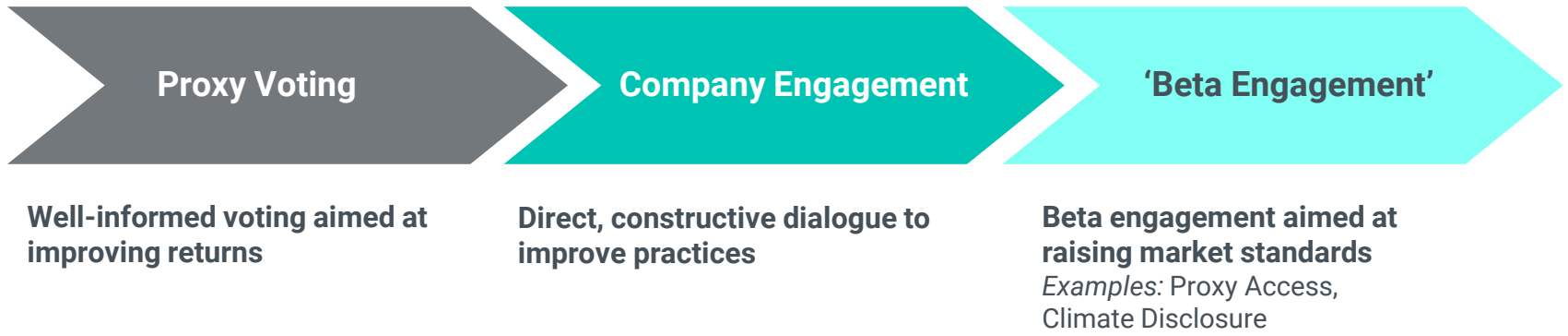
Asset owners increasingly incorporate ESG into their risk reporting, and conversations with portfolio managers. Incorporating ESG into systematic risk reporting can help identify unintended risk.



MSCI Analytics enable the attribution of portfolio risks to the portfolio's ESG exposure, as part of the Risk/Style Indexes

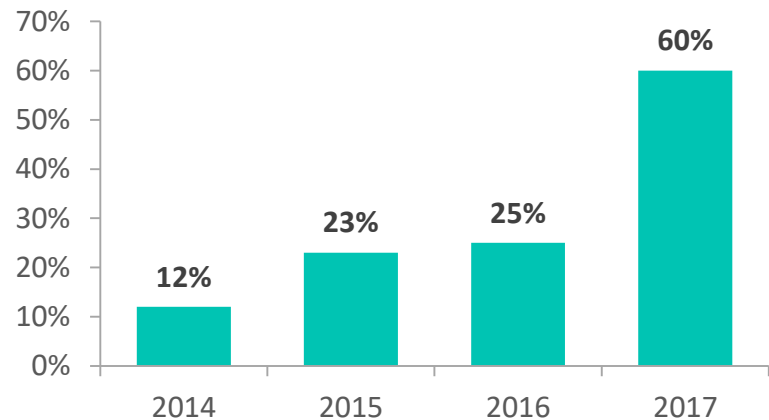
Engage with stakeholders and communicate 1 2 3

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.



Corporate Inquiries/Feedback from Japanese Companies

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.



Engage: provide ESG transparency to stakeholders through systematic reporting

1 2 3

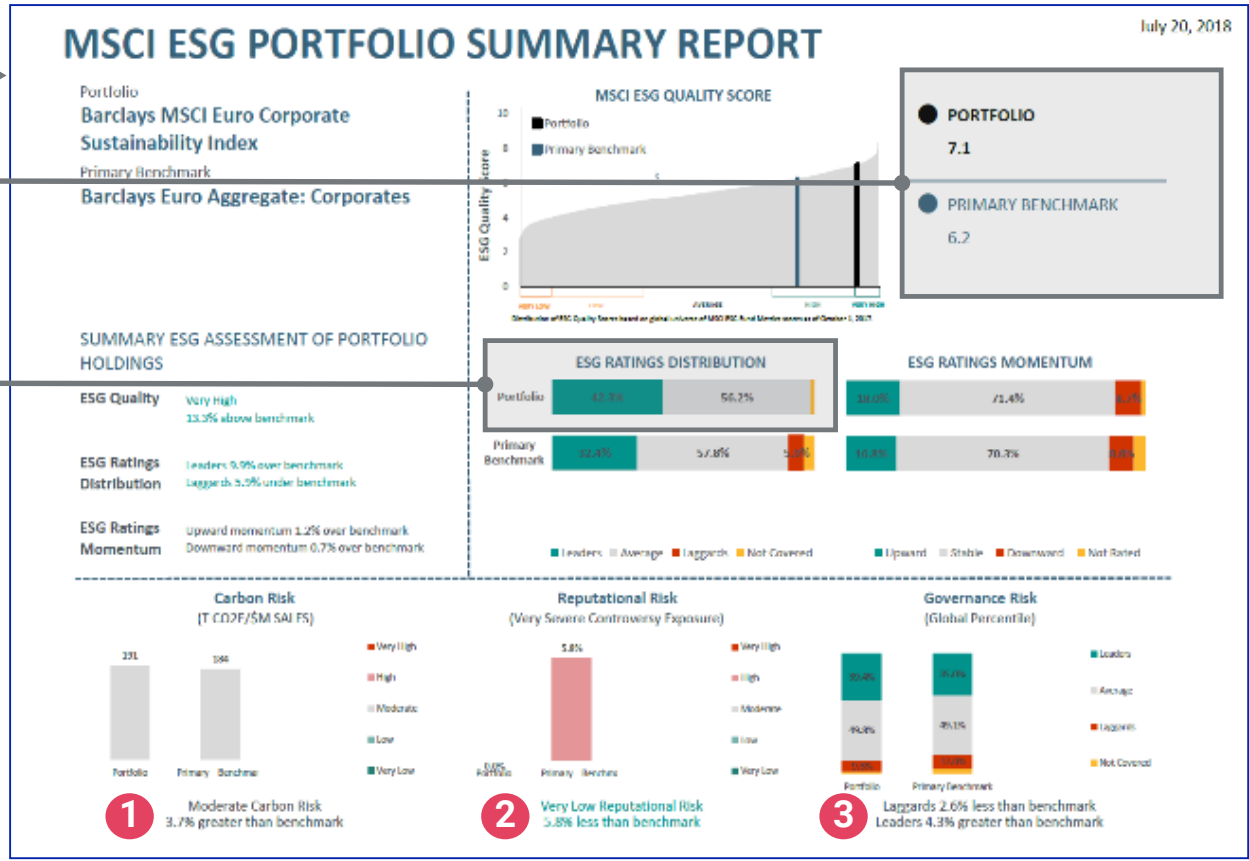
Investors are demanding transparency on ESG portfolio characteristics to understand how their capital is being deployed, and what the environment and societal impacts are. In particular we see asset owners reporting on climate risk exposure, and increasingly alignment with the United Nations Sustainable Development Goals.

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

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



MSCI Emerging Markets ESG Leaders Index

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



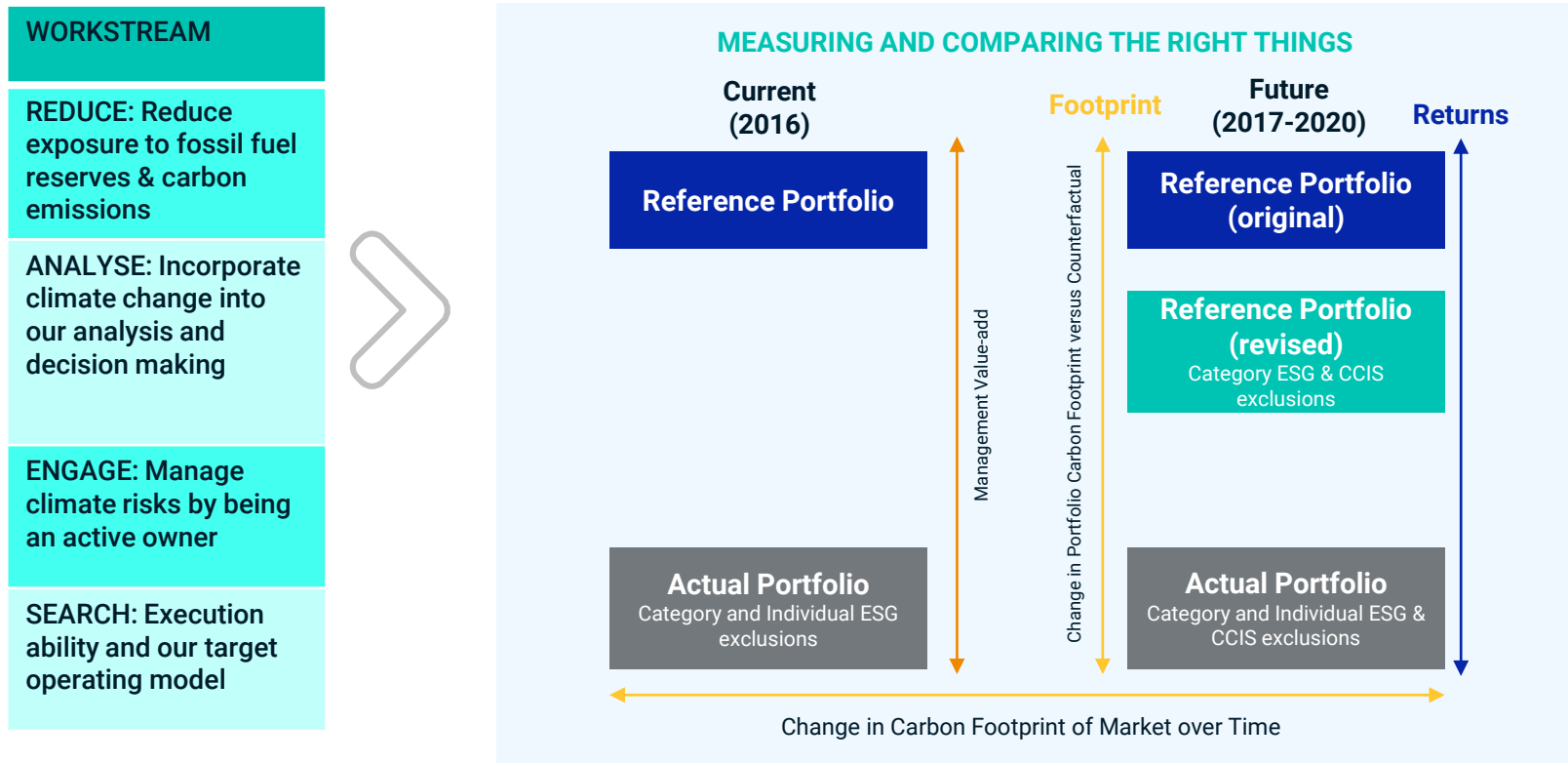
Use cases

- **ESG Integration across Equity and Credit Switzerland**
- **Low Carbon New Zealand**
- **Passive Allocation to ESG & Engagement Japan**
- **Integrated Factor and ESG Netherlands**

Asset owners have implemented low carbon

Example: NZ Super

NZ Super developed a 4 step climate change investment strategy, switching their equity reference portfolio and \$10bn passive equity portfolio to a custom Low Carbon Index (exclusions)



Aligning policy benchmark with exclusion policy

Examples: Ontario Teachers, UN Pension Fund

1 ONTARIO TEACHERS

MSCI ACWI	MSCI ACWI ex Canada ex Tobacco
Tobacco	⊗

“Ontario Teachers' Pension Plan adopted MSCI ACWI ex Canada ex Tobacco as policy benchmark for its global equity portfolio reflecting its decision to divest from Tobacco companies ”

2 UN PENSION FUND

MSCI ACWI	MSCI ACWI ex Tobacco ex Controversial Weapons
Tobacco	⊗
Controversial Weapons	⊗

“The United Nations Joint Staff Pension Fund (UNJSPF) adopted a custom MSCI ACWI ex Tobacco ex Controversial Weapons index. The UNJSPF has historically not invested in Tobacco and Controversial Weapons companies. The Index will therefore better reflect the available investment universe for UNJSPF’s active and passive global equity investments. It will provide a more accurate measure of performance from, and risk in, UNJSPF’s global equities portfolio”

Asset owners demand ESG integration across equity, fixed income, and beyond

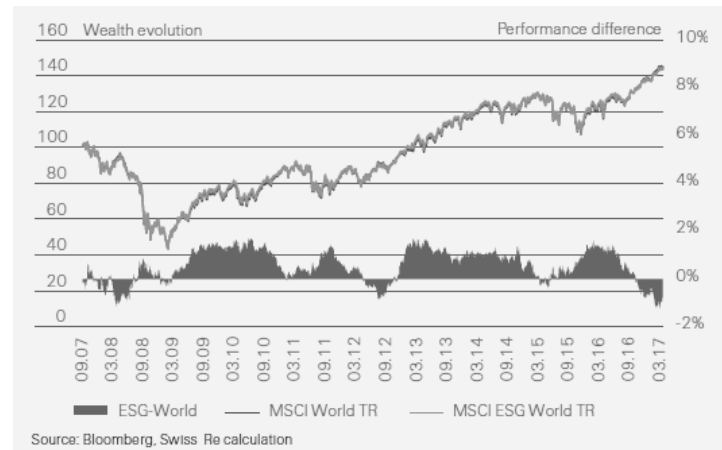
Example: Swiss Re

6th July, 2017 – Swiss Re switched all global equity and credit portfolio benchmarks to MSCI ESG Leaders and Bloomberg Barclays MSCI ESG Corporate Sustainability

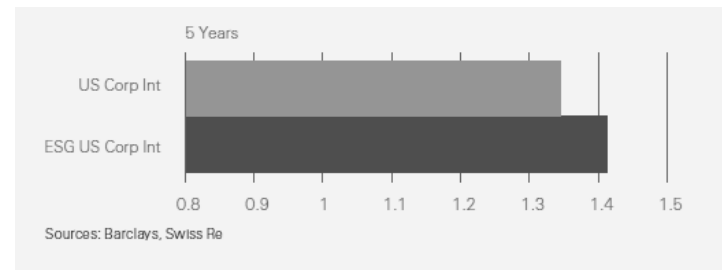
“Enhancing our investment portfolio by adopting broad-based ESG benchmarks has been the most meaningful and strategic step in our journey to integrate ESG considerations into the investment process.”

Guido Fürer, Group Chief Investment Officer at Swiss Re.

EQUITY



FIXED INCOME

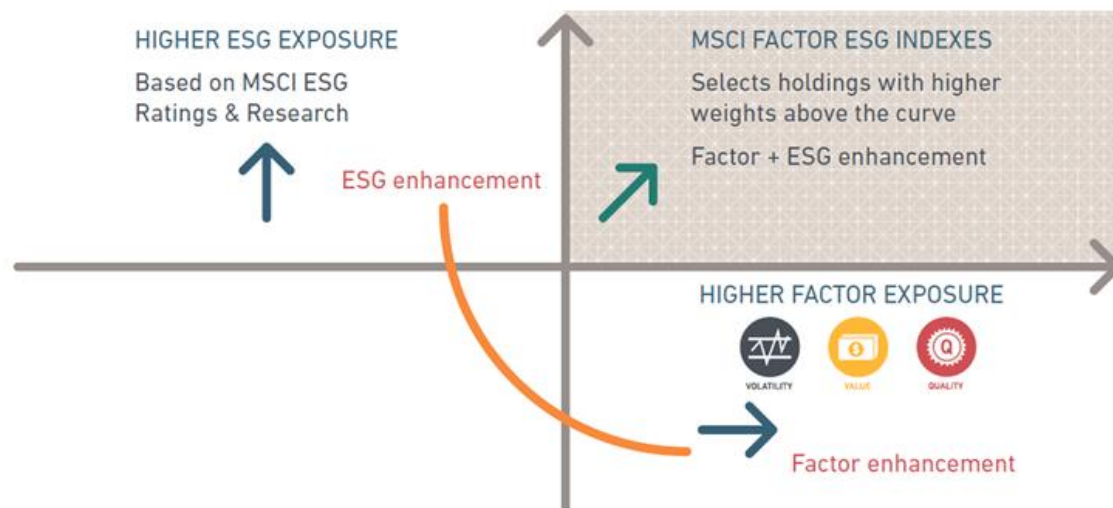


Factor investors are considering ESG

Example: Pension fund in Netherlands

The client wished to overlay their ESG policy onto their factor strategy, selected MSCI for its ability to combine a multiple factor strategy with ESG objectives in a seamless way, and for the quality of its ESG data and research

- \$4bn passive allocation
- Custom MSCI Multiple Factor ESG Target Index
- Value, Quality, Low Volatility
- **Target 20% improvement in ESG Score**



ESG index and engagement

Example: GPIF, Japan

GPIF have allocate to ESG Indexes in an effort to improve the overall market:

“GPIF believes companies want to be part of that [ESG] index, and so will improve their ESG ratings, and thus improve the market overall. I call it the incentive index.”

Professor Kato, GPIF Board Member

GPIF, as a universal owner (large-scale investor holding well-diversified portfolio), is responsible for yielding benefits for its pension beneficiaries by optimizing the investment value chain

GPIF – Universal Owner, Long Term Investor

Investment and Engagement

External Asset Manager

ESG Integration using an ESG Index

Company

Promoting ESG information disclosure

► About MSCI

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.

► Contact us

AMERICAS

+1 212 804 5299

EUROPE, MIDDLE EAST & AFRICA

+44 20 7618 2510

ASIA PACIFIC

+612 9033 9339

msci.com/esg
esgclientservice@msci.com

Notice & disclaimer

This document and all of the information contained in it, including without limitation all text, 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 Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI.

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.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

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 negligence 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 (GICS)" is a service mark of MSCI and 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 ESG Research LLC collects and uses personal data concerning officers and directors, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.