FROM MSCI ESG RESEARCH INC.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE **ANALYSIS AND TOOLS**

The world is changing.
With it, the world of investing is changing.

MSCI

MSCI DELIVERS ANALYSIS AND TOOLS

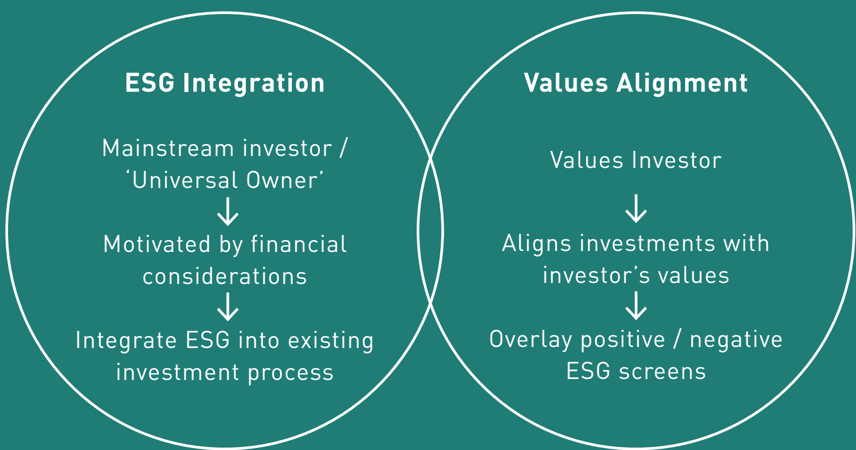
The world is changing. With it, the world of investing is changing. Asset owners and managers are becoming ever more aware of the potential risk and value impacts of **environmental, social and governance (ESG) factors**. From natural resource scarcity to changing governance standards, from global workforce management to the evolving regulatory landscape, ESG factors can impact the long-term risk and return profile of investment portfolios.

With the rapid growth in the number of signatories to the **UN-backed Principles for Responsible Investment (PRI)** worldwide since 2006, the integration of ESG is moving from a niche investment strategy to the mainstream. Signatories agree to six principles which include the integration of ESG factors in the investment decision-making process as well as regular reporting on engagement efforts. **Global assets under management** by PRI signatories now total approximately **USD 45 trillion**, up more than ten-fold from USD 4 trillion in 2006[1].

ENVIRONMENTAL
SOCIAL
GOVERNANCE

TWO DIMENSIONS OF ESG

Institutional investors employ a range of ESG investment strategies driven by two main motivations: values alignment and financial considerations.



1 http://www.unpri.org/signatories/signatories/

ENVIRONMENTAL RISKS AND OPPORTUNITIES

In October 2014, the Intergovernmental Panel on Climate Change (IPCC) released its last and sternest report on the state of the climate[1]. United Nations Secretary General Ban Ki-moon has called for the full support of world leaders, including the investment community, to move away from a fossil fuel economy to a low carbon, renewable energy model in order to mitigate climate change[2].

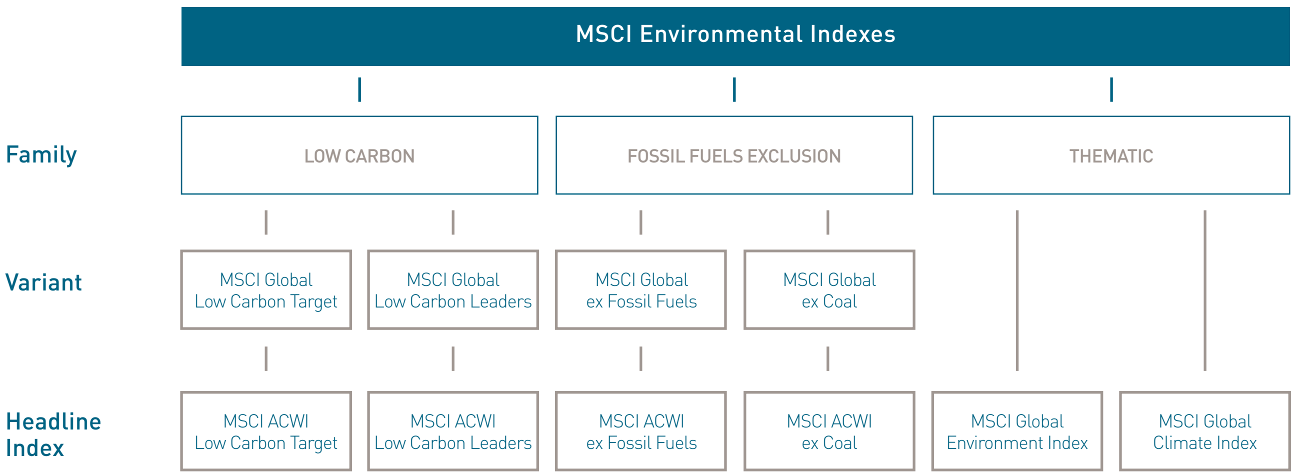
By identifying systemic risks through macro trends like climate change and resource scarcity, together with their implications for sectors and companies, MSCI ESG Research provides data and analysis relevant for both environmentally focused and broad market institutional investors.

There are many more transformational factors at work in our world these days – notably environmental shocks, new technology and disruptive innovations, and evolving societal norms which are not necessarily captured in financial reporting. Examples like risk of loss from extreme weather, supply chain problems and financial systemic risks are not easy to measure.

The concept of stranded assets is increasingly important in investment thinking. There is a growing realization of the tension between the fossil fuel reserves of the global energy industry and the quantity of carbon emissions that will bring about a transformational change in our climate.

The global accord from Copenhagen[3] which aspires to a 2 degree Celsius rise in global temperature, limits fossil fuel consumption to around half of current reserves[4]. Considerable investment is currently focused on finding additional new reserves. As a result, companies in the sector may face increasing headwinds in the longer term[5].

Certain institutional investors have adopted a range of strategies to better measure and manage the risks associated with the global transition to a low carbon economy. MSCI has constructed benchmark indexes designed to meet the needs of institutional investors looking to adopt one of these strategies.



STRANDED ASSETS

A STRANDED ASSET IS THE TERM USED TO DESCRIBE AN INVESTMENT THAT LOSES ITS VALUE WELL AHEAD OF ITS ANTICIPATED USEFUL LIFE BECAUSE OF THE IMPACT OF VARIOUS TRANSFORMATIONAL CHANGES. THE TERM HAS BEEN APPLIED MOST FREQUENTLY TO FOSSIL FUEL RESERVES. OTHER EXAMPLES INCLUDE PRODUCTS LIKE CAMERA FILM (THINK OF KODAK) AND INDUSTRIES LIKE NUCLEAR POWER (THINK OF JAPAN AND GERMANY).

1 "UN climate panel says emissions need to drop to zero this century to keep warming in check." Karl Ritter, Associated Press. November 2, 2014. http://www.usnews.com/news/science/news/articles/2014/11/02/un-climate-report-offers-stark-warnings-hope
2 "Climate Change 2014," The Synthesis Report of the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) Rajendra K . Pachauri, and Leo Meyer. http://ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_LONGERREPORT.pdf
3. United Nations Framework Convention on Climate Change (2010). Report of the Conference of the Parties 30 March 2010.
4. Carbon Tracker (2013). Unburnable Carbon 2013: Wasted Capital and Stranded Assets.
5. MSCI ESG Issue Brief: Stranded Assets as Investment Opportunities. September 22, 2014. Linda-Eling Lee and Roger Urwin. http://www.msci.com/resources/research/articles/2014/MSCI_ESG_Research_Issue_Brief-Stranded_Assets_as_Investment_Opportunities.pdf

ENVIRONMENTAL STRATEGIES: FOCUS ON LOW CARBON

STRATEGY ONE

Minimizing carbon exposure while reflecting the performance of the broad equity market

MSCI has launched a family of Low Carbon Indexes for institutional investors looking for representative benchmarks in the transition to a low carbon economy.

The MSCI Low Carbon Indexes are the first benchmarks designed to address two dimensions of carbon exposure - carbon emissions and fossil fuel reserves – while reflecting broad equity market performance.

- The MSCI Global Low Carbon Target Indexes aim to reflect a lower carbon exposure than that of the broad market by overweighting companies with low carbon emissions (relative to sales) and those with low potential carbon emissions (per dollar of market capitalization).

  The indexes are designed to achieve a 0.3% (30 basis points) ex ante tracking error target while minimizing the carbon exposure relative to their Parent indexes.

- The MSCI Global Low Carbon Leaders Indexes aim to achieve at least 50% reduction in the carbon footprint by excluding companies with the highest carbon emissions intensity and the largest owners of carbon reserves (per dollar of market capitalization). They also aim to minimize the tracking error relative to their Parent indexes.

The MSCI Low Carbon Indexes rely on MSCI ESG Research's unique carbon emissions and reserves data set.

STRATEGY TWO

Excluding companies that own oil, coal and/or gas reserves

For institutional investors looking for a benchmark index to complement an exclusion strategy, the MSCI Global Fossil Fuels Exclusion Indexes are designed to minimize fossil fuel reserves exposure.

The MSCI ACWI ex Fossil Fuels Index and MSCI ACWI ex Coal Index are the first in the series.

The MSCI Global Fossil Fuels Exclusion Indexes utilize MSCI ESG Research's unique fossil fuel reserves data set.

STRATEGY THREE

Allocation focused on clean technology, renewable energy and other companies positioned to benefit from the transition to a low carbon economy

For institutional investors applying this kind of allocation strategy, MSCI provides thematic indexes which identify companies with positive environmental impact, including the MSCI Global Environment Index and the MSCI Global Climate Index.

In addition, MSCI ESG Research provides insight into companies deriving revenues from clean technology activities through MSCI ESG CleanTechMetrics.

SOCIAL RISKS AND OPPORTUNITIES

The roots of ESG and sustainable investment began with investors looking to align their investments with their values around social issues such as human rights, tobacco or weapons production. The values alignment strategy typically takes the form of negative screening intended to exclude those companies that fail to meet client mandated criteria. Investors may look to exclude manufacturers of civilian firearms, producers of alcohol, or companies with poor employee or product safety records, for example. While values and mission-based investing remains an active component of certain SRI strategies globally, for investors focusing on ESG driven investment risks and opportunities, social factors represent the management of human capital, supply chains, and opportunities serving under served markets.

For institutional investors seeking to integrate environmental, social and governance factors into their investment-decision making process, the key social issues represent a core component of our ESG analysis of a company's long term performance in relation to its sector peers. In a world with demographic shifts, regulatory environments and governmental instability, investors may benefit from understanding how well a company is positioned to retain key talent, manage supply chain risk, and outpace local product safety and quality regulations.

CORPORATE GOVERNANCE RISKS AND OPPORTUNITIES

As long term institutional investors, asset owners often look to managers to more fully assess governance-related risks. With the August 2014 acquisition of leading corporate governance research and analysis provider GMI Ratings, governance expertise is now integrated within MSCI's global ESG team. Our analysts provide critical insight into timely corporate events, including analysis of potential governance concerns associated with high profile IPOs like Facebook and Alibaba.

MSCI's unique corporate governance research process examines company events and corporate behavior as well as governance structure, providing data and analysis through MSCI ESG GovernanceMetrics:

- 96 Governance Metrics organized into four pillars (Board, Pay, Ownership and Control, Accounting)
- Coverage of 6,000+ global companies
- Comprehensive data on 65,000 Corporate Directors and Officers
- 13+ years of shareholder proposals and meeting results data

Corporate governance can help identify risk associated with lax oversight, excessive pay, corporate misconduct and accounting irregularities. Through a combination of data, analysis, ratings and other tools, GovernanceMetrics is designed to enable institutional investors to conduct both bottom-up research on individual securities and to assess governance risk across an entire portfolio.

THE MSCI ADVANTAGE

Experienced leadership and emerging markets presence
MSCI ESG Research is founded on 40 years of combined experience in ESG through legacy firms KLD, Innovest, IRRC, and GMI Ratings. Relying on experienced leadership and over 120 analysts with presence in key emerging markets regions including Cape Town, Mumbai, Hong Kong, Beijing and Manila, MSCI ESG Research provides institutional investors with critical insights on key ESG risks and opportunities in markets around the world.

ESG Integration Tools and Services for UN PRI Signatories
MSCI ESG Research consults with clients to help them develop and implement an ESG integration strategy that fits their needs. Prospective or new PRI signatories work with a dedicated client consultant to understand what it means to integrate ESG into the investment decision-making process. For investors interested in evaluating managers or identifying portfolio holdings for engagement, MSCI's portfolio analytics reports provide a comparison of a portfolio against a benchmark or investor-specific ESG guideline.

ESG Leaders Awards
Europe 2013
MSCI ESG Research
Best ESG Research
Sponsored by BNY Mellon Asset Management Int.

GMI Ratings
2013 and 2012
Winner of Thomson Reuters ExtelIRRI Survey
Best Corporate Governance Research

MSCI ESG Research is produced 100% in-house and is incorporated in the MSCI ESG Indexes
MSCI is the only leading index provider with a dedicated in-house ESG research team. Given that MSCI's ESG Research is based in-house, we can control, monitor and manage data quality while aligning ESG Index methodology coherently with research. The MSCI ESG Indexes are designed as benchmarks for institutional investors adhering to prevalent ESG investment strategies. In addition to over 130 equity sustainability indexes, MSCI has collaborated with Barclays to produce a family of ESG fixed income indexes, including the recently launched Barclays MSCI Green Bond Index family.

MSCI ESG Research analysts assess thousands of data points across 34 ESG key issues, covering over 5,500 global companies in more than 70 sectors. ESG Ratings are mapped to over 260,000 fixed income securities. Senior analysts produce cross-sector thematic reports annually on the most important ESG issues, such as water risk.

ESG Ratings, research and data is available through the ESG Manager online platform and is also integrated on MSCI's BarraOne and Barra Portfolio Manager, as well as on FactSet and Style Research.

800 Clients with over $15 Trillion AUM subscribe to MSCI ESG Research, including 125+ Asset Owners with $4.4 trillion in assets[1]

MSCI is a leading provider of comprehensive, integrated research and analysis across all three ESG pillars

1. MSCI Research, as of July 2014

MSCI OVERVIEW

MSCI has been at the forefront of index construction and maintenance for more than 40 years, launching its first global equity indexes in 1969. Globalization and the rapid integration of markets have led MSCI to explore alternative approaches to categorizing the global equity universe and product development. MSCI has remained a market leader by expanding and enhancing its index offering to reflect the evolving and complex needs of the institutional investment community with ground breaking new products, innovative research, high quality data and dedicated client support.

95 OF THE TOP 100 GLOBAL INVESTMENT MANAGERS ARE MSCI CLIENTS[1]

- 1968 — The Capital International Indexes are published, the first set of global stock market indexes for non-US markets.
- 1969 — MSCI Developed Market Indexes (DM)
- 1987 — MSCI Emerging Market Index (EM)
- 1995 — MSCI All Country Indexes (DM & EM)
- 1999 — Global Industry Classification Standard (GICS®)
- 2007 — MSCI Frontier Markets Indexes; MSCI Factor Indexes; MSCI Global Islamic Indexes
- 2010 — MSCI ESG Indexes
- 2012 — MSCI Economic Exposure Indexes
- 2013 — MSCI Multi-Factor Indexes
- 2014 — Low Carbon Indexes

Today, MSCI offers a family of more than 160,000 consistent and comparable indexes which are used by investors around the world to develop and benchmark their global equity portfolios. MSCI indexes are also licensed as the basis for financial products such as exchange traded funds and structured products.

More than 670 ETFs[7] from many of the world's leading ETF providers including iShares, Deutsche Bank, UBS, Lyxor, Amundi, SSgA, Source, HSBC, Commerzbank and Barclays are based on MSCI indexes.

Exchanges around the world have chosen MSCI equity indexes as the basis for numerous listed derivatives. These include: DGCX, EUREX, ICE Futures US, ICE Futures Europe, Johannesburg Stock Exchange and Singapore Exchange.

OVER $9.5 TRILLION IN ASSETS IS ESTIMATED TO BE BENCHMARKED TO MSCI INDEXES[2]

MORE THAN 670 ETFS ARE BASED ON MSCI INDEXES[3]

1 Based on P&I AUM data as of Dec 2013 and internal MSCI data as of September 2014.
2 As of June 30, 2014, as reported on September 30 2014, by eVestment, Morningstar and Bloomberg.
3 Data as of September 30, 2014, calculated by aggregating the number of share classes of all exchange traded funds tracking an MSCI index, as identified by separate Bloomberg tickers. Only primary listings, and not cross-listings, are counted.

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ABOUT MSCI

For more than four decades, MSCI (NYSE: MSCI) has helped global investors build and manage better portfolios. Our research-based tools and services provide our clients with deeper insights into the drivers of risk and performance, broad asset class coverage and innovative ways to bring investment strategies to market. Our offerings include indexes, data, analytical models, regulatory reporting and ESG research. MSCI's clients include the world's 50 largest money managers, as ranked by P&I[1]. For more information, visit us at www.msci.com.

ABOUT MSCI ESG RESEARCH

MSCI's ESG products and services are provided by MSCI ESG Research Inc. 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 are also used in the construction of the MSCI ESG Indexes. MSCI ESG Research is produced by MSCI's indirect wholly-owned subsidiary MSCI ESG Research Inc., a Registered Investment Adviser under the Investment Advisers Act of 1940.

1 As of June 30, 2014, as reported on September 30 2014 by eVestment, Morningstar and Bloomberg.

AWARD WINNING

ETF.com 2013 AWARD WINNER · GlobalCapital Derivatives Awards 2014 WINNER · ESG Leaders Awards · Structured products Europe Awards 2013 · ETF Risk European Rankings 2014 Best index provider for ETF products · Financial News 2014 Awards for Excellence Institutional Asset Management WINNER · European Pensions Awards 2014 WINNER