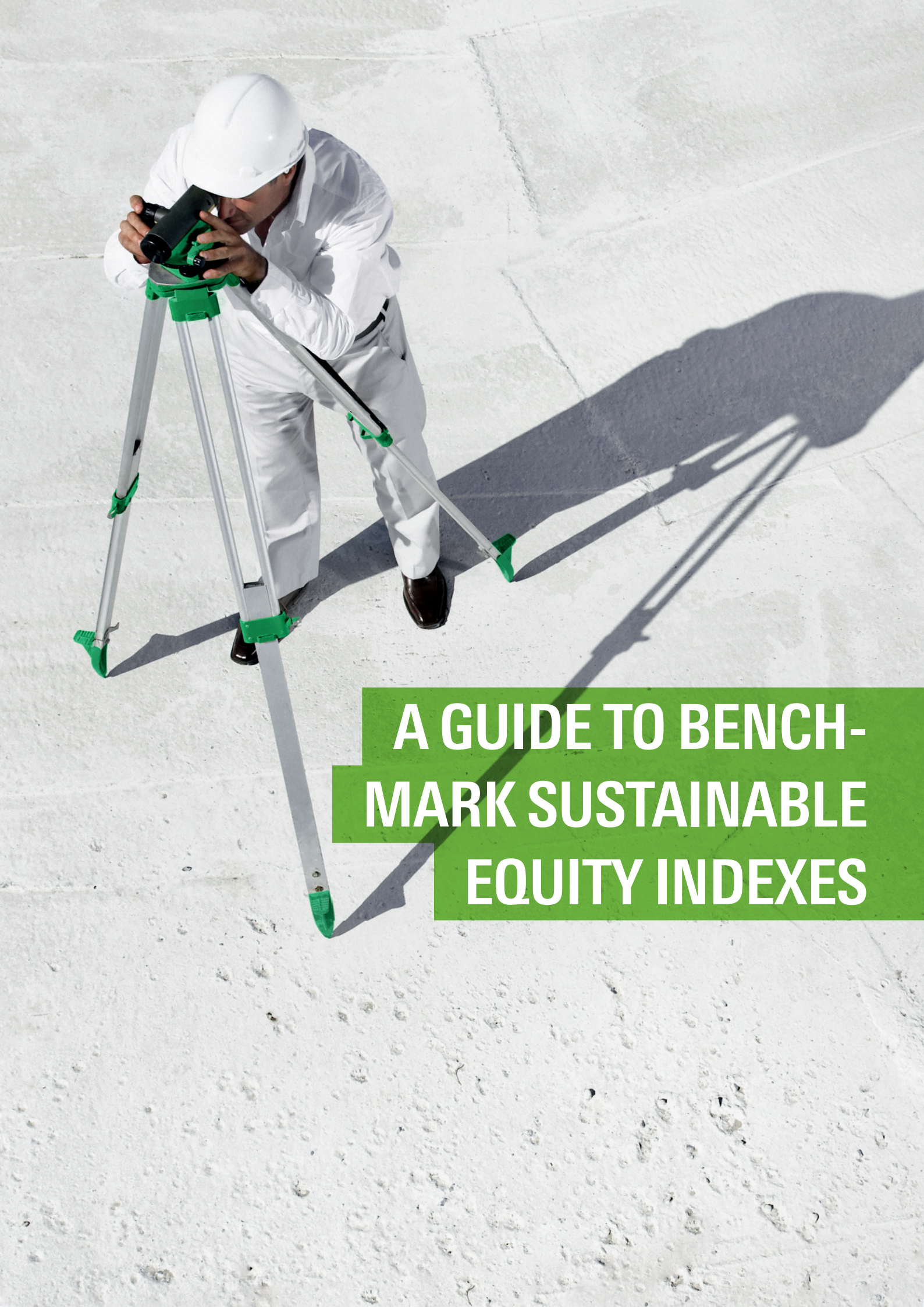


SUSTAINABLE FINANCE REPORT

ISSUE #1

Article 4:
A guide to benchmark
sustainable equity indexes





A GUIDE TO BENCH- MARK SUSTAINABLE EQUITY INDEXES

The universe of sustainable equity indexes has increased significantly over the past decade. In this article, we map the marketplace amid growing investor interest to divest out of fossil fuel holdings and capture emerging opportunities as the market looks to adopt low-carbon index solutions.

Executive summary

Investor demand has led to a growing number of sustainable equity indexes to be launched in the marketplace. These deploy various selection techniques from exclusionary to best-in-class to thematic approaches. The major providers across the ESG index marketplace are MSCI, FTSE and S&P Dow Jones.

In September 2010, the FTSE KLD Indexes transitioned into the MSCI ESG Indexes. The MSCI KLD Indexes, such as the FTSE KLD 400 Social Index, were originally launched in May 1990 and so MSCI can claim to provide the longest track record of sustainable indexes in the marketplace. Among their various indexes, the MSCI World SRI is the benchmark index.

In 2001, the FTSE created the family of FTSE4Good Indexes. These not only pursue similar investment styles as the DJSI family, but also included indexes with specific theme or impact investment solutions. Within the FTSE family, the FTSE4Good Global Index is the benchmark index.

S&P Dow Jones launched a suite of sustainable equity index products in 1999. Among the DJSI family, the Dow Jones Sustainability World Index is the benchmark. This has been complemented by a range of positive exclusion and best-in-class index strategies.

Within the Deutsche Asset Management ESG family, the CROCI World ESG strategy was one of the first to be launched. This is a 75-stock, region-neutral, globally developed market equity strategy and has been run on a live basis since July 2014. Many of Deutsche Asset Management's ESG strategies deploy the ESG Engine filter to ensure compliance with leading standards for environmental, social and governance criteria.

In this article, we examine the sustainable index providers of MSCI, FTSE and S&P Dow Jones. In future reports we will expand our coverage to include other providers such as Stoxx/Deutsche Börse. For the indexes under investigation, these can be classified according to three investment styles, which are outlined on the next page and in [Figure 1](#).

Figure 1: An overview of sustainability indexes in the marketplace

ESG approach			
	Positive/best-in-class	Negative/exclusion	Thematic investing
MSCI	MSCI Global SRI Indexes		MSCI Global Environment Indexes
	MSCI Global Sustainability Indexes	MSCI excluding Controversial Weapons Indexes	MSCI Global Climate Indexes
	MSCI Global Low Carbon Indexes	MSCI Global Fossil Fuels Exclusion Indexes	
FTSE	FTSE4Good Index Series		FTSE Environmental Opportunities Index Series
		FTSE All-World excluding Fossil Fuels Index Series	FTSE Environmental Technology Index Series
		FTSE All-World excluding Coal Index Series	
Dow Jones	DJSI Broad Market Indexes	DJSI Ethical Exclusion Sub-Indexes	
	DJSI Diversified Indexes	DJSI Diversified Select Indexes	
	DJSI Blue-Chip Indexes		

Sources: MSCI, FTSE, S&P Dow Jones, Deutsche Asset Management (October 2015)

Investor demand has led to a growing number of sustainable equity indexes to be launched in the marketplace - deploying selection techniques from exclusionary to best-in-class to thematic approaches.



1 Negative/exclusion

This has been the oldest and most traditional route whereby certain companies or sectors are excluded from the investment universe. Exclusions are usually enforced by “what does a company produce?” and “how do they operate?” The most common exclusionary criteria relates to armaments and specifically cluster bombs and land mines. However, in certain instances this approach can prove challenging. For example, excluding companies that are producing alcohol is relatively straight forward, but it is more challenging to exclude companies that sell it.

2 Positive/best-in-class

This investment approach focuses on companies that have historically performed better than their peers within a particular industry or sector on measures of environmental, social and corporate governance issues. Strategies can vary such that inclusion captures the top percentile of the sector or in certain instances inclusion can be based on momentum whereby low, but improving, ESG-rated companies become incorporated into an index strategy. Indeed in strategic beta methodologies, the best-in-class companies are assigned higher weightings than others and the index then differs from traditional market cap weighting.

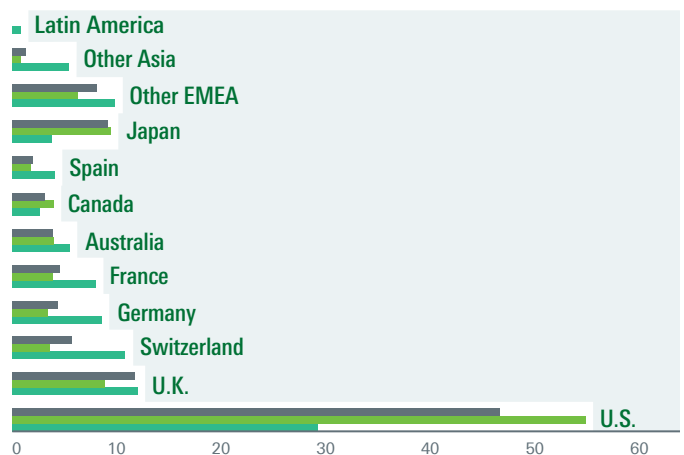
3 Thematic investing

Small but growing, this investment style traditionally refers to targeted investments, typically undertaken in private markets that are aimed at solving specific environmental or social problems. This has tended to be concentrated around environmental issues such as climate change, for example investing in industries that promote clean technologies, improve energy efficiency and reduce pollution.

ESG reference indexes

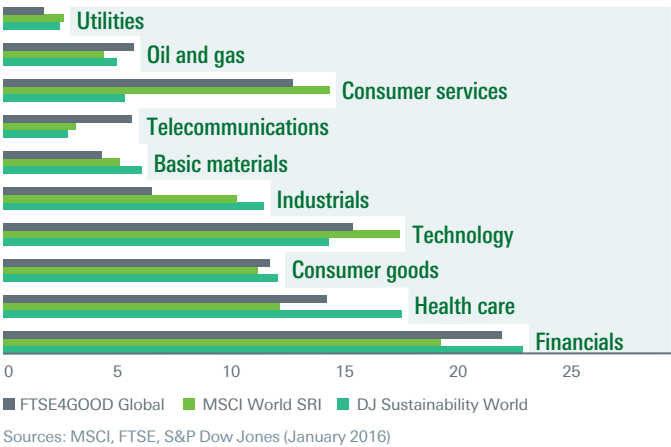
The main reference ESG Indexes for each of these three respective providers are the MSCI World SRI Index, the FTSE4Good Global Index and the Dow Jones Sustainability World Index. Each deploys different techniques for index construction. The fact that the respective sector and constituent weights of each index is different reveals the subjective nature of sustainable index construction. However, from a sector perspective, financials, health care, consumer goods, technology and industrials dominate, comprising around 75% of the index with companies listed in the U.S., Switzerland, the U.K., Japan and Germany constituting the bulk of companies listed by country. A comparison of country and sector weights by respective index is illustrated in [Figures 2 and 3](#). These charts reveal the country and sector biases among the various indexes. In the case of MSCI, we find there are a larger concentration of U.S. listings alongside greater exposure to consumer goods and services. For the DJSI family, listings are more balanced between the U.S. and Europe and there is greater exposure to health care.

Figure 2: Country allocations of the major ESG Equity Indexes



Sources: MSCI, FTSE, S&P Dow Jones (January 2016)

Figure 3: Sector allocations of the major ESG Equity Indexes



MSCI ESG Index family

In September 2010, the FTSE KLD Indexes transitioned into the MSCI ESG Indexes. The range of MSCI KLD Indexes, such as the FTSE KLD 400 Social Index, were originally launched in May 1990 and so can claim to be the longest-running sustainable indexes in the marketplace. MSCI ESG Research provides a broad range of ESG research services analyzing all companies that are part of the MSCI All Country World Index (ACWI). ESG ratings, data and analysis from MSCI ESG Research are systematically used in the construction of the MSCI ESG Index family. MSCI provides index solutions for all major ESG investing approaches, namely best-in-class, exclusion and impact investing, Figure 4. Most MSCI ESG Indexes are designed to provide low active sector and country biases relative to their parent indexes in order to ensure a low tracking error.

Figure 5: The MSCI Global Socially Responsible Indexes exclude companies that are inconsistent with specific values-based criteria and specifically companies involved in the following activities: alcohol, civilian firearms, gambling, military weapons, nuclear power, tobacco, adult entertainment and genetically modified organisms. Additionally, these indexes target companies with high ESG ratings relative to their sector peers, to ensure the inclusion of best-in-class companies from an ESG perspective. Sector weights are also closely aligned to the relative sector weights of the underlying MSCI Global Investable Market Indexes to limit the systematic risk introduced by the ESG selection process. The composition of the MSCI Global Socially Responsible Indexes are reviewed on an annual basis in May and rebalanced in August, November and February.

Unlike the MSCI Global Socially Responsible Indexes, which use negative or exclusionary screens, the MSCI Global Sustainability Indexes are constructed by applying a best-in-class selection process to companies in the regional indexes that make up the MSCI ACWI. The methodology aims to include securities of companies with the highest ESG rating representing 50% of the market capitalization in each sector and region of the parent index. Companies that are not existing constituents of the Global Sustainability Index family must have an MSCI ESG Rating of “BB” or above and an Impact Monitor score of 3 or above to be eligible.

Launched in September 2014, the MSCI Low Carbon Indexes are intended to help identify potential risks associated with the transition to a low-carbon economy while representing the performance of the broad equity market. As a result, this suite of low-carbon indexes is designed to address two dimensions of carbon exposure: first, carbon emissions and second, fossil fuel reserves.

Figure 4: The family of MSCI ESG Indexes

MSCI ESG Index families		
Positive/best-in-class	Negative/exclusion	Thematic investing
MSCI Global Socially Responsible Indexes (SRI)		MSCI Global Environment Indexes
MSCI Global Low Carbon Indexes	MSCI excluding Controversial Weapons Indexes	MSCI Global Climate Indexes
MSCI Global Sustainability Indexes	MSCI Global Fossil Fuels Exclusion Indexes	

Sources: MSCI, Deutsche Asset Management (November 2015)

Figure 5: The methodology and weighting scheme for the family of MSCI ESG Indexes

ESG Index family	Basic methodology	Weighting scheme
MSCI Global Socially Responsible Indexes (SRI)	Consist of companies with the highest ESG ratings making up 25% of the adjusted market capitalization in each sector of the underlying index and exclude companies involved in certain business like alcohol, tobacco, gambling, civilian firearms	Market cap weighted
MSCI Global Sustainability Indexes	Consist of companies with the highest ESG ratings making up 50% of the adjusted market capitalization in each sector of the underlying index	Market cap weighted
MSCI Global Low Carbon Indexes	Low carbon targets indexes: Overweight companies with low (potential) carbon emissions	Minimum carbon emission weight
	Low carbon leader indexes: Overweight companies with highest (potential) carbon emissions	Market cap weighted
MSCI excluding Controversial Weapons Indexes	Exclude companies that are involved in controversial weapons, i.e., cluster bombs, land mines, depleted uranium weapons, chemical and biological weapons	Market cap weighted
MSCI Global Fossil Fuels Exclusion Indexes	Global excluding coal indexes: Exclude companies with coal reserves used for energy purposes	Market cap weighted
	Global excluding fossil fuels: Exclude companies with fossil fuel reserves used for energy purposes	
MSCI Global Environment Indexes	Consist of companies that derive at least 50% of their revenues from environmentally beneficial products and services like alternative energy, green building, pollution prevention	Market cap weighted
MSCI Global Climate Index	Consists of 100 companies that are global leaders in addressing the conditions that contribute to climate change, i.e., renewable energies, future fuels, clean technology and efficiency	Equal weighting

Sources: MSCI, Deutsche Asset Management (November 2015)

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. As a result, the indexes aim to increase exposure to more carbon-efficient companies and decrease exposure to large current and future emitters. The indexes are designed to achieve a target level of tracking error while minimizing the carbon exposure. Index reviews are undertaken twice a year at the end of May and November.

In contrast, the MSCI Global Low Carbon Leaders Indexes exclude companies with high-carbon emissions relative to sales and those with high potential carbon emissions per dollar of market capitalization. This is achieved by ranking constituents by their carbon intensity such that the top 20% of securities, by number, are excluded from the index. Like the MSCI Global Low Carbon Target Indexes, index reviews are undertaken in May and November.

Figure 6: The methodology of the FTSE ESG Rating model

Data hierarchy	Score assessment	Exposure assessment	Data range
Top level	1 ESG Rating		Absolute ESG Rating: 0–5 to 1 decimal point ESG Supersector relative ESG Rating: 1–100 percentile
Second level	3 Pillar Scores Environmental, social, governance	3 Pillar Exposures Measures the relevance of each of the 3 Pillars to each company	Absolute ESG Pillar Score: 0–5 to 1 decimal point Absolute ESG Pillar Exposure: 0–5 to 1 decimal point ESG Supersector relative ESG Pillar Score: 1–10 decile
Third level	14 Theme Scores e.g., anti-corruption, climate change, health and safety	14 Theme Exposures Measures the relevance of each of the 14 Themes to each company	Absolute ESG Theme Score: 0–5 to 1 decimal point Absolute ESG Theme Exposure: 0–5 to 1 decimal point
Fourth level	350 indicators Typically 10–35 per Theme An average of ~125 indicators apply per company	Indicator applicability is relative to theme exposure	Points assigned per indicator met

<http://www.ftse.com/products/downloads/FTSE-ESG-Methodology-and-Usage-Summary-Full.pdf>. Sources: FTSE, Deutsche Asset Management (November 2015)

Other indexes within the MCI ESG family include the MSCI excluding Controversial Weapons and MSCI Global Fossil Fuel Exclusion Indexes. Not surprisingly, these indexes adopt exclusion criteria such that the MSCI excluding Controversial Weapons Index excludes all companies that are involved in cluster bombs, land mines, depleted uranium and chemical and biological weapons. The MSCI Global Fossil Fuel Exclusion Indexes are comprised of indexes that either exclude companies with coal reserves used for energy purposes or companies that use fossil fuels (oil, gas and coal) for energy purposes.

Meanwhile the MSCI Global Environment Indexes and MSCI Global Climate Indexes are inclusionary indexes selecting companies that either derive at least 50% of their revenues from environmentally beneficial products and services, such as alternative energy, green building and pollution preventing, or are global leaders in addressing the conditions that contribute to climate change, such as renewable energies and clean technologies, [Figure 5](#).

FTSE ESG Index family

The FTSE4Good Index Series, launched in 2001, is a visible benchmark for identifying companies with good holistic ESG approaches and is a sub-product of FTSE ESG Ratings. FTSE ESG Ratings is a tool for investors to incorporate ESG factors along with other company information into their investment decision-making process. It provides a snapshot of a company's transparency and management of environmental and social issues relevant for its business activities and the governance by which this is managed.

Inclusion in the index is reviewed in June and December, and for those companies that fall below the threshold for inclusion they will be notified and provided with a period of time to improve.

The FTSE ESG Ratings, which cover all securities in the FTSE All-World Developed Index, are based on around 350 indicators covering around 4,100 companies with three exposure levels, five rating scores and 14 themes, [Figure 6](#). So for example, a company is assessed across 14 themes and assigned a score and risk exposure for each ESG thematic pillar. From here a cumulative score and risk exposure for each of the environmental, social and governance pillars is compiled to deliver a single ESG rating, which is a cumulative calculation of total ESG performance. At each of the theme, pillar and overall levels there is a rating and an exposure grading based on the underlying data gathered.

The FTSE ESG Ratings are then used to determine the constituents of the FTSE4Good Index, which in turn measures the performance of companies demonstrating strong environmental, social and governance practices. Inclusion in the index is reviewed in June and December, and for those companies that fall below the threshold for inclusion they will be notified and provided with a period of time to improve. If after this time has expired the company has not made sufficient progress it will be removed from the index.

Figure 7: FTSE ESG Index family

ESG Index family	ESG approach	Basic methodology	Weighting scheme
FTSE4Good All-World Index Series	Best-in-class and exclusion	Only include companies that meet certain ESG criteria, especially a minimum FTSE ESG Rating, and excludes companies manufacturing tobacco, weapon systems and components for controversial weapons	Market cap weighted
FTSE All-World excluding Fossil Fuels Index Series	Exclusion	Exclude companies that have a certain revenue and/or reserve exposures to fossil fuels	Market cap weighted
FTSE All-World excluding Coal Index Series	Exclusion	Exclude companies that have certain exposure to coal mining or general mining and/or reserve exposures to coal	Market cap weighted
FTSE Environmental Technology Index Series	Thematic investing	Includes a fixed number of companies that derive at least 50% of their business from environmental markets and technologies, e.g., renewable and alternative energy, energy efficiency, etc., to coal	Market cap weighted
FTSE Environmental Opportunities Index Series	Thematic investing	Only includes companies that derive at least 20% of their business from environmental markets and technologies, e.g., renewable and alternative energy, pollution control, etc.	Market cap weighted

Sources: FTSE, Deutsche Asset Management (November 2015)

The FTSE4Good Index Series has been designed to create a family of benchmark and tradable indexes in response to the growing interest in socially responsible investment around the world. Within the FTSE4Good Series, there are currently five indexes:

- 1 | FTSE4Good Global Index
- 2 | FTSE4Good USA Index
- 3 | FTSE4Good Europe Index
- 4 | FTSE4Good U.K. Index
- 5 | FTSE4Good Japan Index

The FTSE also compiles specific thematic indexes with an environmental or ESG bias, Figure 7. The FTSE All-World excluding Fossil Fuels Index Series is a market-capitalization weighted index designed to represent the performance of the constituents of the FTSE All-World Index after the exclusion of companies that have a certain revenue and/or reserve exposure to fossil fuels.

This is becoming increasingly relevant for global investors due to the downward revaluation risks associated with stranded assets. Stranded assets are fossil fuel deposits that must remain unburned or in the ground for the world to avoid the worst impacts of climate change. The U.K. and Canadian stock markets are particularly exposed in this regard given the large share of fossil fuel companies listed on their domestic stock exchanges as measured by market cap. Meanwhile, the FTSE All-World excluding Coal Index Series is designed to represent the performance of companies of the FTSE All-World Index after the exclusion of companies that have certain exposure to coal mining or general mining and/or reserve exposures to coal.

The FTSE Environmental Technology Index Series measures the performance of companies globally whose core businesses is the development and deployment of environmental technologies as defined by the FTSE Environmental Markets Classification System (EMCS). These include renewable and alternative energy, energy efficiency, water infrastructure and technology, waste management and technologies, pollution control, environmental support services and food, agriculture and forestry. Forming part of the overall FTSE Environmental Markets Index Series, the FTSE Environmental Technology Index Series requires companies to have at least 50% of their business derived from environmental markets and technologies as opposed to at least 20% for the FTSE Environmental Opportunities Index Series also outlined in Figure 7 above.

Figure 8: RobecoSAM's Corporate Sustainability Assessment*

Economic dimension	Environmental dimension	Social dimension
Anti-crime policy/measures	Biodiversity	Addressing cost burden
Brand management	Business opportunities financial services	Bioethics
Codes of conduct/compliance/ corruption and bribery	Business risks large projects/export finance	Corporate citizenship and philanthropy
Corporate governance	Climate change governance	Controversial issues, dilemmas in lending
Customer relationship management	Climate strategy	Financial inclusion/capacity building
Innovation management	Electricity generation	Health outcome contribution
Market opportunities	Environmental footprint	Human capital development
Marketing practices	Environmental policy/management system	Labor practice indicators
Price risk management	Environmental reporting	Social reporting
Research and development	Operation eco-efficiency	Stakeholder engagement
Risk and crisis management	Transmission and distribution	Standard for suppliers
Stakeholder engagement	Water-related risks	Strategy to improve access to drugs or products
Scorecards/measurement systems		Talent attraction and retention

* The actual criteria used within the questionnaire will vary from industry to industry to reflect industry-specific drivers. Each criterion can contain between 2–10 questions
Source: RobecoSAM (April 2015)

Dow Jones Sustainability Index family

Launched in 1999, the Dow Jones Sustainability Indexes (DJSI) track the stock performance of the world's leading companies in terms of economic, environmental and social criteria.

Dow Jones uses a best-in-class approach by deploying RobecoSAM's Corporate Sustainability Assessment (CSA) methodology, which assesses a company's sustainability profile. This entails RobecoSAM every March inviting the world's largest 3,400 publicly traded companies to participate in the annual CSA. This means that no sector of the global economy is excluded from the process as the assessment aims to identify the best companies in each industry.

A total of 59 industry groups, derived from the GICS industry classification system, are analyzed by RobecoSAM using industry-specific questionnaires featuring 80–120 questions. However, for companies that choose not to respond to the CSA questionnaire and that meet certain size criteria, RobecoSAM complete the questionnaire to the extent possible, based on publicly available information.

Companies are evaluated on a range of financially relevant sustainability criteria covering the economic, environmental and social dimensions, **Figure 8**. The actual criteria used within the questionnaire will vary from industry to industry to reflect industry-specific drivers. Each criterion can contain between 2–10 questions. Companies receive a Total Sustainability Score (TSS) between 0–100 and are ranked against other companies in their industry.

There are four sub-groups to the DJSI family, which are outlined below and in **Figure 9**:

- 1 | **DJSI Broad Market Indexes** are comprised of a family of twelve indexes, of which the Dow Jones Sustainability World Index is the flagship index. To qualify for membership of the DJSI World Index, companies must be ranked in the top 10% by Total Sustainability Score (TSS) from each of the 59 industrial classifications of the 2,500 largest companies across 47 countries in the S&P Global Broad Market Index.

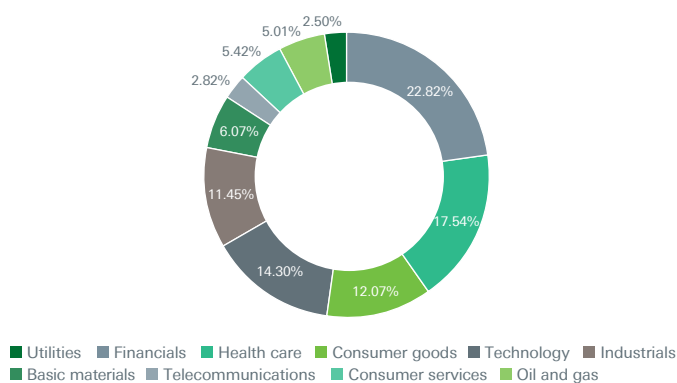
The composition of the DJSI is reviewed every September based on the TSS. The latest review was announced on September 10, 2015 with the index comprising 317 components in 59 classified industries across 26 countries.

Figure 9: An overview of the Dow Jones Sustainability Index family

Index family	ESG approach	Basic methodology	Weighting scheme
DJSI Broad Market	Best-in-class	Contain the top 10% stocks with the highest RobecoSAM Total Sustainability Score (TSS) from each industry using the RobecoSAM industry classification	Market cap weighted
DJSI Diversified	Best-in-class	In contrast to the DJSI Broad Market Indexes, the DJSI Diversified Indexes aim to be country- and sector-neutral relative to the S&P Global LargeMidCap Index and its regional subsets	Market cap weighted
DJSI Blue-Chip	Best-in-class	Include a fixed number of largest companies in the DJSI Broad Market Indexes. Constituents are weighted by their normalized Total Sustainability Score	Weighted by sustainability score
DJSI Ethical Exclusion Sub-Indexes	Best-in-class and exclusion	Exclude companies from the DJSI Broad Market Indexes that are active in certain sectors like alcohol, tobacco, gambling, firearms, cluster bombs, etc.	Market cap weighted

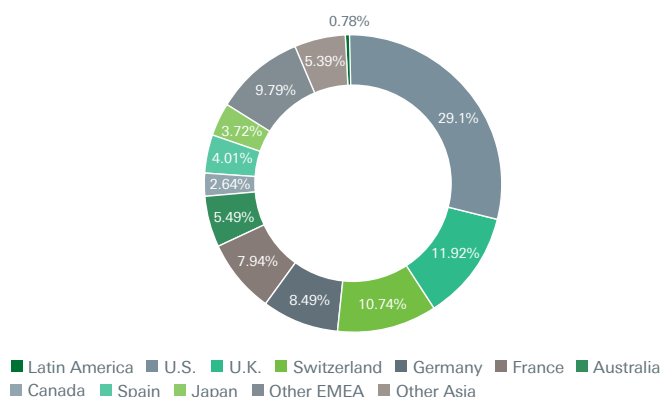
Sources: S&P Dow Jones (September 2015)

Figure 10: Country allocation of the DJ Sustainability World Index



Sources: S&P Dow Jones (January 2016)

Figure 11: Sector allocation of the DJ Sustainability World Index



Source: S&P Dow Jones Indexes (Data as of January 2016)

From a country perspective, the Dow Jones Sustainability World Index is dominated by stocks listed in the U.S., the U.K., Switzerland, Germany, France and Australia, which combined account for almost 75% of the index, Figure 10. Meanwhile financials, health care, consumer goods and technology dominate from a sector perspective, Figure 11.

- 2 **DJSI Diversified Indexes** cover stocks that are selected within country and sector based on corporate sustainability score rankings until one-third of the float-adjusted market capitalization of each country/sector combination within the index universe has been captured. In total, there are ten DJSI Diversified Indexes covering both the developed and developing world. The flagship DJ Sustainability World Diversified Index was launched in May 2013 and is rebalanced semiannually in March and September.
- 3 **DJSI Blue-Chip Indexes** In total, there are ten DJSI Diversified Indexes covering both the developed and developing world. The benchmark within this category is the Dow Jones Sustainability World 80 Index. It tracks the performance of the largest 80 companies globally that are included in the Dow Jones Sustainability World Index. The companies are then weighted by their TSS sustainability score. The index was first launched in August 2008 and is rebalanced annually.
- 4 **DJSI Ethical Exclusion Sub-Indexes** exclude companies from the DJSI Broad Market Indexes that are engaged in certain sectors such as tobacco, gambling and armaments, among others. The Dow Jones Sustainability World Enlarged Index excluding Alcohol, Tobacco, Gambling, Armaments & Firearms and Adult Entertainment represents the top 20% of the largest 2,500 companies in the S&P Global BMI based on long-term ESG criteria and excludes companies who operate in certain activities.

The suite of Deutsche Asset Management ESG strategies

Deutsche Asset Management offers a range of ESG-focused strategies. As outlined in the previous article, the ESG Engine is used to create a wide range of bespoke investment products. The engine applies a proprietary aggregation methodology to data obtained from leading third-party experts who determine whether there is an underlying ESG exposure. One of the first investment products was the CROCI World ESG strategy. This has now been complimented by a range of alternative screens including a corporate fixed income and a sovereign EM screen, among others. For the CROCI World ESG strategy, the selection methodology starts from the MSCI World Index, excluding financials. Once all non-compliant ESG stocks are excluded, the remaining stocks are ranked by their respective trailing 12-month economic P/E. **Figure 13** details the list of CROCI ESG criteria based on controversial business activities as well as breaches of norms while performing business activities in accordance with the UN Global Compact. The economic P/E ratio is a valuation of a company's additional reserves and liabilities, which is tracked and systematically adjusted by the CROCI team. The idea is to make companies comparable regardless of region and/or sector. The top 75 stocks are then selected and in order to ensure region neutrality, the same weights as the MSCI World Index are targeted. As a result, the CROCI World ESG strategy is a 75-stock, region-neutral, globally developed market-equity strategy and has been run on a live basis since July 2014.

The CROCI World ESG strategy has a 99% correlation to the CROCI World Strategy (100 stocks) and brings together two of Deutsche Asset Management's key capabilities: equity valuation and investable strategies from CROCI alongside ethical reporting via the ESG Engine. The CROCI World ESG strategy therefore deploys an exclusionary ESG filter on companies that have material exposure to non-compliant activities.

Conclusion

Sustainable indexes are moving into the mainstream as investors increasingly look to exclude non-compliant ESG companies, but also to gain exposure to positive/best-in-class investment solutions. We identify MSCI, FTSE and S&P Dow Jones as the main ESG equity index providers. Alongside World ESG Indexes, we are also witnessing the growth of specific thematic ESG Indexes that aim to address pressing environmental and/or social challenges. The most popular among this group are low-carbon or environmentally focused indexes, with MSCI and FTSE the major providers. The development of these indexes reflects the growing interest to divest out of fossil fuel investments to address the threat posed by global warming. According to Arabella Advisors' September 2015 report, 436 institutions and 2,040 individuals across 43 countries and representing USD 2.6 trillion in assets have committed to divest from fossil fuel companies.

Figure 12: The performance of the MSCI, FTSE4GOOD and DJSI Indexes* compared



*BBG tickers: MSCI SRI M4WOSOCR; FTSE4GOOD Global T4GGL; DJ Sustainability World W1SGITRD
Sources: Bloomberg Finance LP, Deutsche Asset Management (January 2016)

Figure 13: List of CROCI ESG screens

Test for controversial business activities	Test for breaches of norms while performing business activities*
Adult entertainment Alcohol Anti-personnel mines Armaments Atomic weapons Cluster munitions Gambling Tobacco Uranium munitions	Business ethics Business management Child labor Corruption Environment Forced labor Human rights Labor rights Product controversies Reputational risks General ESG conformity

*In accordance with the UN Global Compact
Sources: Deutsche Asset Management (October 2015)

Within Deutsche Asset Management, our suite of ESG Indexes deploys the ESG Engine filter to ensure compliance with leading standards for environmental, social and governance to provide a variety of ESG investment overlay solutions.

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Important disclosures

CROCI

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