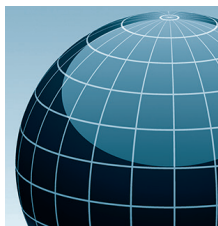


THE CHALLENGES OF ESG INVESTING — REGULATION



Mamadou-Abou Sarr
Global Head of ESG
Northern Trust
ms350@ntrs.com

Ansumana Bai-Marrow
Senior Compliance
Consultant
Asset Management
Northern Trust
ab236@ntrs.com

The changing shape of environmental, social and governance (ESG) “regulation” is among the main drivers of ESG investing growth. To better understand the issues around this topic, we examine the status of global efforts to pass legislation and implement codes of practice and self-regulation. What do these efforts mean for investors as they consider incorporating ESG criteria into their portfolios? And will these efforts encourage investors to look at ESG when they otherwise might not?

A GROWING SECTOR

The constant waltz between financial markets and policymakers on the topic of ESG illustrates the ever-evolving relationship between the two. The fast pace of new financial product development requires adequate regulation. While ESG does not fall into the bucket of a typical regulatory risk, the principle is the same, and ESG needs sufficient regulation to provide clarity and safeguards within the financial industry.

The ideal scenario is when regulators act not only to safeguard client assets but also to assist industry change and innovation in order to set the path for a sustainable global financial system.

The integration of ESG into the portfolio construction process is one of the major trends in asset management. In 2014, approximately 30% of long-term assets under management globally integrated ESG factors, up from 22% in 2012, and interest continues growing. The drivers of such growth are multi-dimensional and include issues such as investor beliefs that result in exclusionary and/or norm-based approaches; thematic investments supporting sustainability; and shareholder advocacy and active ownership.

The development of separate laws, ministerial statements and voluntary codes demonstrates how broadly defined “regulation” and market practice are working in tandem to spread understanding and practice of ESG investing. Strictly speaking, there is no set of ESG-specific regulations. What exists is, in fact, a collage of diverse statutory national requirements for certain asset owners; intergovernmental ambitions; private sector initiatives; voluntary codes; and principles. Asset owners and asset managers are becoming increasingly aware of the risks and opportunities related to ESG issues. Yet complying with new regulations affecting ESG investing and adhering to voluntary codes could be challenging when translated into investment policies and portfolio management investment processes.

Since ESG investing reflects the individual beliefs of investors, it continues to elude easy definition. As we highlighted in our “Doing Good and Doing Well”¹ research, investors have many varied reasons for considering ESG criteria in their portfolios: personal, reputational, political or to meet mandated environmental or social goals. The complexity of objectives, coupled with the rapid spread of adoption, presents challenges for asset owners grappling with how to best implement ESG in their index portfolios. The relative youth of the capability means that “best practice” is a work in progress even for the most-sophisticated and well-equipped organizations.

1. “Doing Good and Doing Well: How Quality Can Enhance Your ESG Strategy,” Northern Trust, Line of Sight, February 2014



SRI AND ESG INVESTING

The blend of social, governance and economic issues has rapidly made its way into the investments space. The excessive demand for scarce resources resulted in social inequalities, poor governance, corruption and negative environmental externalities. In an effort to overcome these inequities, socially responsible investing (SRI) has evolved into a movement that capitalizes on positive environmental, social and governance factors.

The United Nations Principals for Responsible Investing (UNPRI) explains that responsible investing must be approached by focusing on long-term investment returns, steering away from short-term fixes. Solutions should aim to widen the set of positive factors encouraging improvement and health of the global economy. In practice, responsible investing can be implemented in a few ways, including:

- Integrating ESG analysis during research and decision-making processes;
- Implementing proxy voting and engagement strategies to give shareholders a say in the governance of companies;
- Incorporating negative and positive screens;
- Taking a best-in-class approach that invests in companies with better governance and ESG performance; and
- Selecting assets on broad investment themes including climate change or demographic change – thematic investments.

ESG, however, relates to socially responsible investing as an investment vehicle used in capital markets and by investors to evaluate corporate behavior and to determine the future financial performance of companies.² Asset managers will evaluate a company's environmental impact and how these environmental risks may affect its income. They will also assess the social principles of the company's business relationships — how does the company conduct itself socially?

REGULATION CHALLENGE: SHORT- OR LONG-TERM?

Regulating ESG investing is challenging, given the variety of reasons investors have for adopting ESG strategies and the various priorities of governing bodies. There have been a number of attempts at regulation, self-regulation, private-sector initiatives, voluntary codes of practice and defining investor principles within the industry (Exhibit 1, page 3). A key example of this effort is the European Commission's (EC's) proposed amendment to the Shareholder Rights Directive, which is intended to apply to all companies quoted on stock exchanges within the European Union (EU):

“...asset managers' main concern has become their short-term performance relative to a benchmark or to other asset managers. Short-term incentives turn focus and resources away from making investments based on the fundamentals (strategy, performance and governance) and longer-term perspectives, from evaluating the real value and longer-term value creative capacity of companies and increasing the value of the equity investments through shareholder engagement.”³

At first glance, this directive isn't overtly ESG-related. However, the “long-termism” inherent in the EC's comments seems to encourage investors to look at the ESG credentials of the securities’

2. “Definition of ESG,” *the Financial Times/lexicon*

3. *Freshfields Bruckhaus Deringer*, “A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institution Investment,” October 2005, p. 13

issuers, since a robust approach to ESG suggests a long-term focus. The first test for asset owners faced with such laws, regulations and directives is to interpret and incorporate the considerations into a framework across their entire holdings.

Once asset owners conduct this analysis, they then must weigh the relative importance and overlap of the various standards and requirements, including local regulations and industry codes. While it is not an exhaustive list, Exhibit 1 illustrates the current breadth of regulation fostering ESG integration across the globe, ranging from mandatory to voluntary drivers. For ease of reference, we have sub-divided the content by the type of regulation:

1. **Integrating nonfinancial factors** into investment decisions
2. **Exclusion lists** – Banning investments in breach of ratified norms and convention, such as the Convention on Cluster Munitions and anti-personnel mine producers ratification
3. **Disclosure** – Requiring investors to disclose to what extent, if at all, they consider ESG factors

EXHIBIT 1: GLOBAL ESG REGULATION

	MANDATORY	MARKET EXPECTATION/ QUASI-REGULATION	OPTIONAL OR MANDATORY
Investment analysis integration	<ul style="list-style-type: none"> Canada (Manitoba) – Pension Benefits Amendment 1 act (made lawful consideration of non-financial criteria as part of investment decision-making) South Africa – Reg 28 of the Pension Funds Act 	<ul style="list-style-type: none"> U.K. Stewardship Code Australia – Corporate Governance: A guide for fund managers and corporations 	<ul style="list-style-type: none"> Global – UN Principles for Responsible Investing OECD Guide lines for Multinational Enterprises
Exclusion list	<ul style="list-style-type: none"> Global – International sanctions (various governments and bodies) Belgium – Vandenbroucke Law 2003 	<ul style="list-style-type: none"> Netherlands – “AFM Exclusion list” Norway – Ethical Guidelines 	<ul style="list-style-type: none"> Global – UN Global Compact
Disclosure	<ul style="list-style-type: none"> U.K. – The Occupational Pension Schemes (Investment) Regulations 1999, SI 1999/No.1849 Australia – Corporations Act 2001 and NGR Act 2007 Canada (Ontario) – Pension Benefits Act (Regulation 235/14) – Effective Jan. 1, 2016 Italy – Legislative Decree no 252 Art.6 para 14 Sweden – Public Pension Funds Act 2000 (2000:192) EU – Accounting Directive 	<ul style="list-style-type: none"> China – Guidelines on environmental information (Shanghai Stock Exchange) Israel – Voluntary greenhouse gas emission registry U.S. – SEC 2010 requirement for corporates to disclose climate-related risk in firm’s 10-k reports 	<ul style="list-style-type: none"> Global – UN Global Compact German Sustainability Code

Source: UNPRI and Freshfields⁴

4. UNPRI, “Responsible Investment: Standards, codes and regulation,” *Global ESG Regulatory Mapping*, Angeles L. Neher, University of Hohenheim, Germany

Although the collage is a complex assembly of the obligatory and the optional, there are only a limited number of instances that require investors to “comply” with national legislation when dealing with ESG. The challenge of implementation generally rests with investors themselves and notably pension funds, for which most regulation was created.

CHALLENGE: REGULATION

One could classify the different regulations and core principles by the objectives they address: environmental, social or governance issues. In addition, international conventions are still subject to differing national ratification and implementation. Therefore, while countries may be signatories to key accords and international treaties, the way in which they implement these into their national legal framework and/or enforce them differs widely. According to the UNPRI, some of the most commonly used regulations, codes and standards affecting ESG⁵ are:

EXHIBIT 2: COMMON ESG-RELATED CODES AND STANDARDS

Environmental

CODES AND STANDARDS	OPTIONAL OR MANDATORY
The Montreal Protocol	Optional*
The UN Framework Convention on Climate Change, the Kyoto Protocol and the Copenhagen Accord	Optional*
The Stockholm Convention	Optional*
The Rotterdam Convention	Optional*
The Basel Convention	Optional*
The Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) (The Washington Convention)	Optional*
The International Organization for Standardization, ISO 9000 and ISO 14000	Optional*

Social

CODES AND STANDARDS	OPTIONAL OR MANDATORY
The Universal Declaration of Human Rights	Optional*
The United Nations International Labour Organisation Conventions	Optional*
ISO 26000	Optional*
Good manufacturing practices in the production of food and pharmaceutical	Mandatory**
1997 Ottawa Convention on anti-personnel landmines	Optional*

5. “Examples of ESG-related codes and standards,” *Principles for Responsible Investment/CDC 2010*



Governance

CODES AND STANDARDS	OPTIONAL OR MANDATORY
The UN Convention against Corruption	Optional or Mandatory
The UK Proceeds of Crime Act and the UK Bribery Act	Optional*
The OECD Anti-Bribery Convention	Mandatory
Good manufacturing practices in the production of food and pharmaceutical	Optional*
OECD Guidelines for Multinational Enterprises	Optional*

Source: Freshfields Bruckhaus Deringer, "A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institution Investment," October 2005, p.13

* International treaties remain optional until they are ratified or accede, at which point they become legally binding under international law.

** In many jurisdictions, good manufacturing practices are enforced by national regulatory agencies, e.g., the Food and Drug Administration in the United States, the Medicines and Healthcare Products Regulatory in the United Kingdom and the Korea Food and Drug Administration in South Korea.

ESG VOLUNTARY CODES

There exists a plethora of codes, standards and guidelines because there is no consensus on a unified definition of ESG.⁶ That said, two of the main voluntary codes are the United Nations Global Compact Principles (UNGCP) and UNPRI, two principles-based initiatives backed by UN codes. They are widely used globally, since they embrace universal standards across areas such as human rights, labor, environment, anti-corruption and ESG disclosure and integration. They also catalyze business action, emphasizing collaboration and collective action.

One way to measure the link among mandatory regulation, voluntary codes and ESG integration is to examine the breakdown of the different strategies asset owners' use. Applicable elements of ESG regulations or voluntary codes often translate into investment portfolios via the use of negative, exclusionary or norm-based screening. In fact, this is the most common strategy used, comprising US\$14.3 trillion of the US\$21.4 trillion worth of professionally managed assets that incorporate ESG concerns. Norm-based screening following voluntary codes such as the UNGCP is also significant at US\$5.5 trillion but currently is found on a large scale only in Europe.

A plethora of codes, standards and guidelines exist because there is no unified definition of ESG.

6. "Global Sustainable Investment Review 2014," Global Sustainable Investment Alliance

THE UNITED NATIONS GLOBAL COMPACT PRINCIPLES

Human Rights

- Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and
- Principle 2: make sure that they are not complicit in human rights abuses.

Labor

- Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
- Principle 4: the elimination of all forms of forced and compulsory labor;
- Principle 5: the effective abolition of child labor; and
- Principle 6: the elimination of discrimination in respect of employment and occupation.

Environment

- Principle 7: Businesses should support a precautionary approach to environmental challenges;
- Principle 8: undertake initiatives to promote greater environmental responsibility; and
- Principle 9: encourage the development and diffusion of environmentally friendly technologies.

Anti-Corruption

- Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

Source: United Nations Global Compact, "The Ten Principles," 2015.

One of the main challenges with voluntary ESG regulation is the lack of harmonization in directives, laws and codes. Voluntary codes are subject to different interpretation across the globe, and they are not enforceable to ensure consistent application. Whether these are determined at country, industry or company level, every voluntary code can be deciphered to each segment differently.

There is no “best” approach to address environmental changes nor a single solution.

REGULATION – ECONOMIC INCENTIVE OR CONTROL?

Either economic incentive or the more-aggressive command-and-control approach is commonly used to tackle environmental regulation. However, there exists neither a “best” approach to address environmental changes nor a single solution to the issue.

Historically, this debate has been handled very differently on either side of the Atlantic. Given the large number of individual countries, Europe has a broad mix of country-specific regulations and few EU-wide environmental regulations. Europe relies heavily on taxes coupled with incentive-compatible rebate schemes to impose environmental changes.⁷ In 2012, the European Environment Agency reported that environmental taxes produced 2.4% of gross domestic product (GDP) for the EU.⁸ By creating a tax-based incentive program, European countries have constructed a full cost-benefit analysis by helping companies understand both the monetary and environmental “costs” they are contributing to. Last year’s EC tax reforms paper explained this initiative:

“Environmentally related taxes are not only a means for generating revenue, they can also be used as part of a market-based strategy for implementing environmental policy. They offer a way of internalizing the external costs that production and consumption of goods and services have on the environment. Putting a cost on negative externalities, such as water pollution, waste generation or carbon emissions, encourages efficient use of resources and improves the functioning of the market.”⁹

This approach to environmental control is widely non-existent in the United States, which implements a control-and-command approach where the government sets strict emission levels. Since the 1960s, the United States has developed a centralized policy and conducted preliminary regulatory research via institutions such as the U.S. Environmental Protection Agency. These institutions are required to execute an impact analysis on any proposed regulation.

The government may create these set levels, but they may not always be in line with the goal of higher GDP. Many economic surveys now point to a positive correlation between economic growth and the generation of carbon emissions.¹⁰ Intuitively this makes sense, as the greater production in the manufacturing and oil-and-gas industries may help boost overall GDP but would prove not so favorable to our carbon wallet.

If legislation and environmental taxes continue to develop and increase over time, this may inhibit the global rate of GDP growth. Investors should begin to think of ESG investing as a potential hedge to possible regulatory changes. U.S. investment manager Robert Litterman, founding partner of Kepos Capital and chairman of its Risk Committee, supports this theory, stating:

“Many economists regard climate risk as a factor that will reduce the dispersion of potential future growth scenarios, and therefore as a potential hedge against other random factors affecting future economic well-being.”¹¹

7. “Economic Incentives versus Command and Control,” Winston Harrington and Richard D. Morgenstern, Fall/Winter 2004

8. “Resource-Efficient Green Economy and EU Policies,” European Environment Agency Report No 2/2014

9. “Tax Reforms in EU Member States 2014,” European Commission, June 2014

10. “What Is the Right Price for Carbon Emissions?” Bob Litterman, published by The Cato Institute, “Regulation,” Summer 2013, p. 38

11. Ibid.



The United States uses the command-and-control approach to determine environmental regulations. This approach can be divided into three mechanisms:

EXHIBIT 3: COMMAND-AND-CONTROL APPROACH MECHANISMS ¹²

Ambient standards	Set specific quality standards for resources. The Clean Air Act is an example of this.
Source-specific emission limits	Resemble ambient standards in that limits are set, allowing only a given amount of emissions from individual sources.
Technology requirements	Refer to the specification of techniques or equipment that must be used to control emissions. The greatest benefits this method provides are tangible results that technology can measure, which make it the most popular choice.

Source: U.S. Environmental Protection Agency

The challenge for the United States is determining how to price carbon in the market for companies with high volumes of carbon emissions.

CHALLENGE: COUNTRY-SPECIFIC REGULATION

There are limited instances that require investors to “comply” with national legislation when dealing with ESG, and currently none set out how ESG should be incorporated into the investment process.

As Europe comprises a large number of individual countries, the continent has a broad mix of country-specific regulations and few EU-wide environmental regulations. Europe relies heavily on taxes coupled with incentive-compatible rebate schemes to impose environmental changes.¹³ Last year’s EC tax reforms paper explained this initiative:

“Environmentally related taxes are not only a means for generating revenue; they can also be used as part of a market-based strategy for implementing environmental policy. They offer a way of internalising the external costs that production and consumption of goods and services have on the environment. Putting a cost on negative externalities, such as water pollution, waste generation or carbon emissions, encourages efficient use of resources and improves the functioning of the market.”¹⁴

This approach to environmental control is widely non-existent in the United States. Control-and-command allows for the government to set strict emission levels. Nevertheless, these levels may not always be in line with their message of working toward a higher GDP.

For the United States, the challenge is determining how to price carbon in the market for companies with high volumes of carbon emissions. The uncertainty surrounding climate change and its potential future effects makes it difficult to agree on the price of negative externalities. By putting a price on carbon, this may incentivize producers to be cognizant of greenhouse gas emissions, which could potentially reduce economic growth in the American economy.

12. U.S. Environmental Protection Agency. National Center for Environmental Economics, “Economic Incentives for Pollution Control,” Section 3.2. Command and Control.
13. “Economic Incentives versus Command and Control,” Winston Harrington and Richard D. Morgenstern, Fall/Winter 2004
14. “Resource-Efficient Green Economy and EU Policies,” European Environment Agency EEA Report No 2/

Legislative initiatives to ban investment in cluster munitions have emerged.

CLUSTER IMPLEMENTATION EXAMPLES

Over recent years, a number of legislative initiatives to ban investment in cluster munitions have emerged. Some countries addressed the investment issue as part of the Convention on Cluster Munitions ratification measures. Others issued separate laws (or ministerial statements) prohibiting investments. Here are some examples¹⁵

Belgium: As the first country to legislate against cluster munitions, Belgium prohibits all investors except index funds from acquiring shares in companies associated with cluster munitions.

France: Investment in companies linked to cluster munitions is considered as “assistance” in France and is illegal. Therefore, French asset managers are de facto required to have an exclusion policy in place for cluster munitions and anti-personnel mines.

Ireland: Investment of public money in cluster munition producers has been banned since 2008; however, this covers neither passive investments nor investments by counties and municipalities.

Italy: Law No. 95, Italy’s national implementation legislation for the Oslo convention, requires that Italy work to prevent the use of mines and cluster munitions, advocate for adherence to the total ban on mines and cluster munitions, and seek to universalize the Convention on Cluster Munitions.

Luxembourg: Individuals, businesses and corporate entities in Luxembourg are prohibited from knowingly financing cluster munitions or explosive sub-munitions. However, there are ambiguities, as the law does not explain whether producers of cluster munitions are excluded from investment, and the text of the law does not define the term “financing.”

Switzerland: Article 8c of The Federal Law on War Material prohibits buying shares or bonds of a company that develops, produces or acquires prohibited war material “where the prohibition of direct financing is circumvented thereby.”

The Netherlands: According to the Market Abuse Decree (2013), Dutch institutional investors and funds cannot invest in producers of cluster munitions. The law allows some exceptions, for instance, in the case of index funds or investments in third-party funds. The scope of the ban limits itself to new investments.

THE FUTURE: REGULATION AND POSSIBLE MARKET DEVELOPMENT

The market is the real regulatory force, since individual governments are very likely apprehensive to mandate ESG incorporation into the investment process. However, the financial crisis focused attention on ESG risks and considerations. As a result, there is increased coordination around ESG disclosure, stewardship, engagement and exclusions.

On the regulatory framework, as ESG consideration becomes more accepted and widely considered, the hope is that firms will not only be more directly involved with issuers but also with governments. One can expect that this process should lead to more-harmonized laws and regulations — similar to what we’ve seen in financial regulation — as global firms seek workable requirements. Up until this point, national governments are expected to continue pushing for greater transparency by investors and their agents around how they incorporate considerations of ESG factors into their investment-making decisions.

Greater incorporation and disclosure could potentially foster more transparency. As that encourages greater quantification of ESG risk, more non-financial (ESG) factors will be included in the price-formation process, making capital markets more effective.

The real regulatory force is the market.

15. “Worldwide Investments in Cluster Munitions: Shared Responsibility,” IKV PAX Christi, December 2013

The moment of critical mass could be around the corner.

Activist investors have been doing this for many years by using insights into an issuer to force change or by factoring in idiosyncratic risk. This made the concept unpalatable to many investors and institutional players long before the market labelled it as “ESG” and attached notions of conservation and sustainability to it.

Until the market considers ESG factors as a matter of course, leading firms and buy-side stakeholders will build on the momentum of ESG investing. The moment of critical mass could be just around the corner, as we see a growing number of products and investment strategies incorporating ESG into their methodologies alongside traditional factors like value, size and momentum. There also is an emergence of indices incorporating ESG considerations and standardized ESG ratings.

We worked closely with index providers to develop methodologies allowing investors to tilt toward firms that perform well versus ESG factors or toward those showing the most change (positive or negative). Strategies such as these, overlaid with a quality-fundamental screen, are another method to gain ESG investing methodology while seeking improved returns by taking compensated risks.

Investor awareness is the seedbed for ESG innovation.

INVESTOR AWARENESS ENCOURAGES ESG INNOVATION

The challenges we’ve discussed should not dissuade responsible investors. On the contrary, investor awareness is the seedbed for innovation in ESG. The shaping of the ESG regulatory framework not only fosters greater ESG integration in investment portfolios but also addresses some of key the challenges around ESG and SRI semantics and nomenclature.

Asset owners and policymakers feed on each other’s advancements and provide perpetual motion that drives the ESG market forward. The acceptance of voluntary codes and principles testifies that the investment community is becoming more receptive to following aspirational norms and code of conducts but, more importantly, to disclose ESG activities.

The regulatory framework as it relates to ESG matters is constantly evolving. Nuances between national and regional requirements can prove challenging when asset owners are developing or implementing ESG policies. While constant monitoring of laws and conventions should be part of good governance practices, the adherence to core ESG principles should mitigate ESG risks and breach of regulations.

As policy matters take input from practitioners, asset managers play a key role in providing investment solutions mindful of the regulatory framework and flexible enough to evolve with the shaping of new regulations. As ESG becomes more mainstream, asset owner initiatives and innovation by consultants and asset managers will pace the waltz between financial markets and the policymakers on the topic of ESG integration.

CUSTOM INDICES BUILT ON INVESTOR DATA

Northern Trust Asset Management engaged with some of our institutional clients in Europe to identify any commonalities in the way they implement ESG screening criteria in developed and emerging markets. We also looked at how they translate voluntary codes and principles into investment guidelines. In line with industry data, we noted that negative screening and norm-based screening were among the strategies investors most commonly use.

We built custom indices excluding companies that do not comply with UNGCPS. These are defined as companies that derive more than 5% of revenues from the manufacture or supply of tobacco products (or the supply of key products for the manufacture of tobacco products) and firms that make cluster bombs, landmines, nuclear weapons and biological/chemical weapons.

The main challenge is translating ESG policies and guidelines in multi-asset-classes investment portfolios – without additional risks.

ALIGN INVESTMENTS WITH ESG NORMS

In this ever-evolving regulatory framework, we believe investors should align their investments with ESG norms and regulations applicable to their jurisdictions. They also should consider the implications of exclusionary/norms-based strategies in portfolio constructions. Adhering to voluntary codes serves a greater purpose in supporting sustainable economies and societies and encourages investors to look at ESG when they otherwise might not. But the main challenge is translating ESG policies and guidelines in multi-asset-classes investment portfolios without triggering additional risks, such as sector mis-weights, tracking error, volatility, et cetera.

The changing shape of ESG “regulation” is among the main drivers of growth of ESG investing. Globally, more codes and conventions are being developed to help asset owners integrate ESG criteria into their investment portfolios. These include the United Kingdom’s Pension Funds Guide to Responsible Investment Reporting in Public Equity, the Japanese Stewardship Code, and the South African Code of Responsible Investing. For ESG investments to expand beyond equities and grow further, the new generation of ESG investment capabilities will need to reconcile societal, regulatory and performance objectives.

FOR MORE INFORMATION

At Northern Trust, we believe you should not have to compromise your ESG values to get good value. To learn how we can help you navigate the effects of ESG regulations and developments on your portfolio, contact your Northern Trust relationship manager or visit northerntrust.com/esgexplorer

Head Office: 50 South La Salle Street, Chicago, Illinois 60603 U.S.A. Incorporated with limited liability in the U.S. Products and services provided by subsidiaries of Northern Trust Corporation may vary in different markets and are offered in accordance with local regulation. Northern Trust Asset Management comprises Northern Trust Investments, Inc., Northern Trust Global Investments Limited, Northern Trust Global Investments Japan, K.K., NT Global Advisors, Inc. and investment personnel of The Northern Trust Company of Hong Kong Limited and The Northern Trust Company. This material is directed to professional clients only and is not intended for retail clients. For Asia-Pacific markets, it is directed to institutional investors, expert investors and professional investors only and should not be relied upon by retail investors. **For legal and regulatory information about our offices and legal entities, visit northerntrust.com/disclosures.** The following information is provided to comply with local disclosure requirements: The Northern Trust Company, London Branch; Northern Trust Global Services Limited; Northern Trust Global Investments Limited. The following information is provided to comply with article 9(a) of The Central Bank of the UAE's Board of Directors Resolution No 57/3/1996 Regarding the Regulation for Representative Offices: Northern Trust Global Services Limited, Abu Dhabi Representative Office. Northern Trust Global Services Limited Luxembourg Branch, 2 rue Albert Borschette, L-1246, Luxembourg, Succursale d'une société de droit étranger RCS B129936. Northern Trust Luxembourg Management Company S.A., 2 rue Albert Borschette, L-1246, Luxembourg.

Société anonyme RCS B99167. Northern Trust (Guernsey) Limited (2651)/Northern Trust Fiduciary Services (Guernsey) Limited (29806)/Northern Trust International Fund Administration Services (Guernsey) Limited (15532). Issued by Northern Trust Global Investments Limited. Past performance is no guarantee of future results. All material has been obtained from sources believed to be reliable, but its accuracy, completeness and interpretation cannot be guaranteed. This information does not constitute investment advice or a recommendation to buy or sell any security and is subject to change without notice. Returns of the indexes also do not typically reflect the deduction of investment management fees, trading costs or other expenses. It is not possible to invest directly in an index. Indexes are the property of their respective owners, all rights reserved. Important Information Regarding Hypothetical Returns — Where hypothetical portfolio data is presented, the portfolio analysis assumes the hypothetical portfolio maintained a consistent asset allocation (rebalanced monthly) for the entire time period shown. Hypothetical portfolio data is based on publicly available index information. Hypothetical portfolio data contained herein does not represent the results of an actual investment portfolio but reflect the historical index performance of the strategy described which was selected with the benefit of hindsight. Components of the hypothetical portfolio were selected primarily utilizing actual historic market risk and return data. If the hypothetical portfolio would have been actively managed, it would have been subject to market conditions that could have materially impacted performance and possibly resulted in a significant decline in portfolio value.



Northern Trust

© NORTHERN TRUST 2015 THE NORTHERN TRUST COMPANY

northerntrust.com | The Challenges of ESG Investing – Regulation | 12 of 12

Q 57341 (4/15)