

# Sustainable Investing Roundup

Austin, TX

11-08-2017



- 8:45-9:00 Introduction
- 9:00-9:50 Sustainable Investing: Past, Present and Future from Policies to Realities  
*Brian Deese, Global Head of Sustainable Investing at BlackRock*  
*Bob Smith, President & Chief Investment Officer at Sage, Moderating*
- 9:50-10:10 Break
- 10:10-11:00 Best Practices in Measuring and Monitoring Sustainable Practices  
*Katie Schmitz Eulitt, Strategic Advisor at Sustainable Accounting Standards Board*
- 11:00-11:50 The Challenges & Benefits of Implementing Sustainable Practices Into an Organization  
*David Lear, VP Corporate Sustainability at Dell & Scott Macmurdo, Sustainability Specialist at NRG*  
*Nicholas Erikson, Assistant Vice President of Portfolio Management at Sage, Moderating*
- 11:50-12:30 Lunch
- 12:30-1:20 Started at the Bottom, Now We are Here: How Living in a Dumpster for a Year Inspired the Home of the Future  
*Dr. Jeff Wilson, Founder & Professor Dumpster at Kasita*
- 1:20 -2:10 The Investing Enlightenment  
*Mirtha D. Kastrapeli, Global Head, Center for Applied Research at State Street*  
*Komson Silapachai, VP, Research & Portfolio Strategy at Sage, Moderating*
- 2:10-2:30 Break
- 2:30-3:20 Practical Tools to Integrate ESG into the Investment Process  
*Shila Wattamwar, Associate Director of Advisory Services at Sustainalytics*  
*Gregory Elders, Bloomberg Intelligence ESG Analyst at Bloomberg*  
*Ryan O'Malley, Fixed Income Portfolio Strategist at Sage, Moderating*
- 3:20-3:30 Closing Comments
- 3:30-5:00 Reception

## Sustainable Investing: Past, Present and Future From Policies to Realities

**Brian Deese**  
Global Head of Sustainable Investing  
Blackrock





# Sustainable Investing: Past, Present and Future from Policies to Realities

Brian Deese, Global Head of Sustainable Investing at  
BlackRock

November 8, 2017



BLACKROCK®



# Sustainable Investing Goes Mainstream

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# Sustainable Investing Goes Into the Mainstream

Source: BlackRock

# Sustainable Investing Goes Into the Mainstream

**Environmental, social, and governance (ESG) issues  
– ranging from factors like climate change to board effectiveness –  
have real and quantifiable financial impacts in the long-term.**

# Sustainable Investing Goes Into the Mainstream

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## Exclusionary Screens



Avoid objectionable exposures by removing industries or companies that are involved in controversial businesses, such as tobacco, weapons, fossil fuels, gambling

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## ESG Factors



Overweight companies that have strong Environmental, Social, and Governance considerations, e.g. clean energy weighted, low carbon, sustainability optimized or weighted

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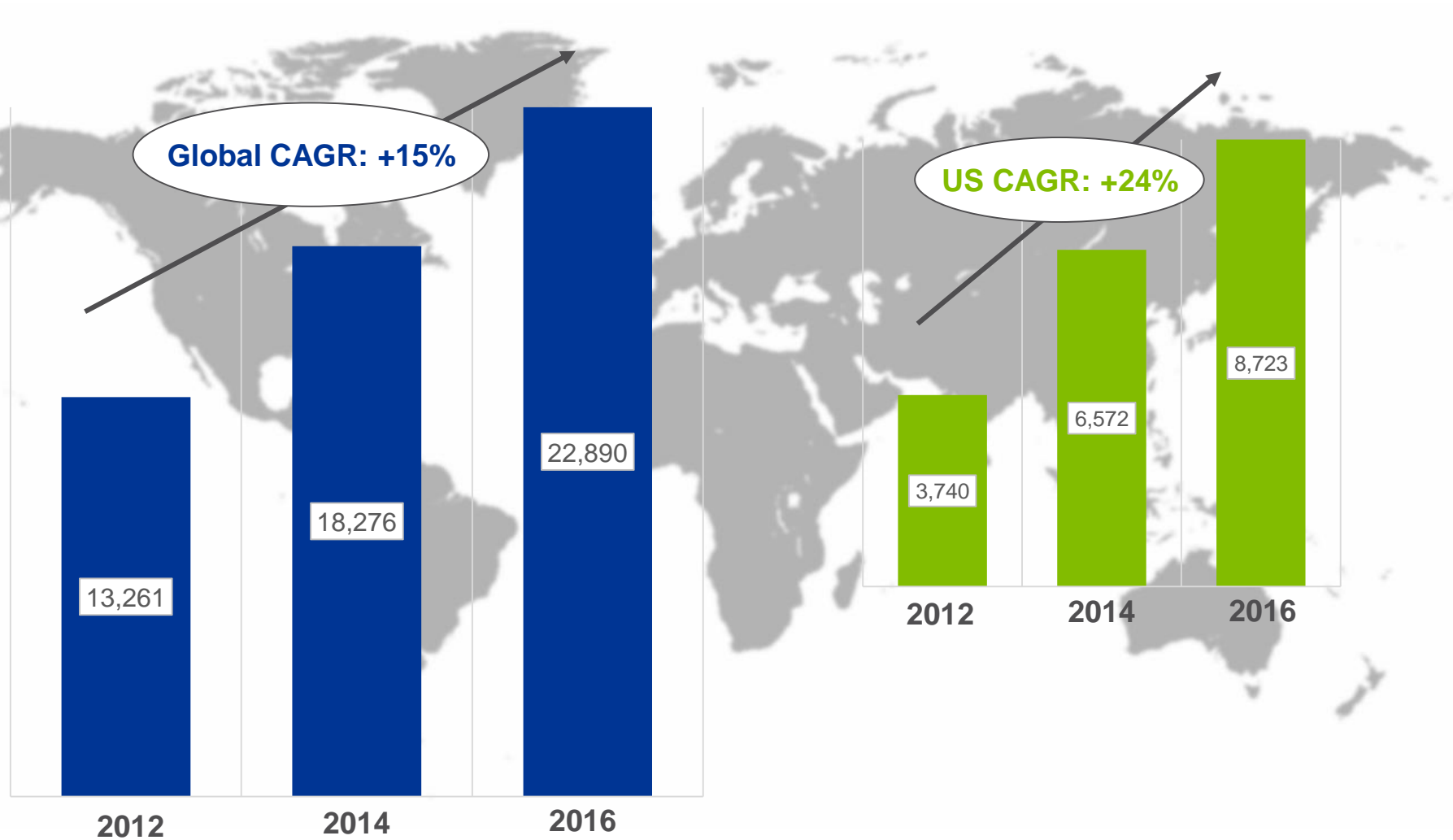
## Impact Targets



Target defined and measurable impact outcomes across social and environmental issue areas including, alternative energy, health, and empowerment

# Global Sustainable Assets are nearly \$23 Trillion

US is the fastest growing sustainable market



Source: Global Sustainable Alliance Review 2014, 2016.

# Drivers of Global Growth in Sustainable Investing

Policy + Regulation

Markets + Technology

Shifting Asset Owner  
Demographics

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# Drivers of Global Growth in Sustainable Investing

Policy + Regulation

Markets + Technology

Shifting Asset Owner  
Demographics



**The 2015 Paris Agreement** requires regular global reporting on emissions and implementation efforts to keep a global temperature rise below 2°C

Image Source: Arnold Boissou, Getty. European SIF; December 2016.

# Drivers of Global Growth in Sustainable Investing

Policy + Regulation

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Shifting Asset Owner  
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Shifting Asset Owner Demographics



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**Fossil-fuel Deadlines** are accelerating the electric vehicle push, as China, the Netherlands, Norway, France, the UK, and India have all set deadlines to end sales of gasoline and diesel powered vehicles.

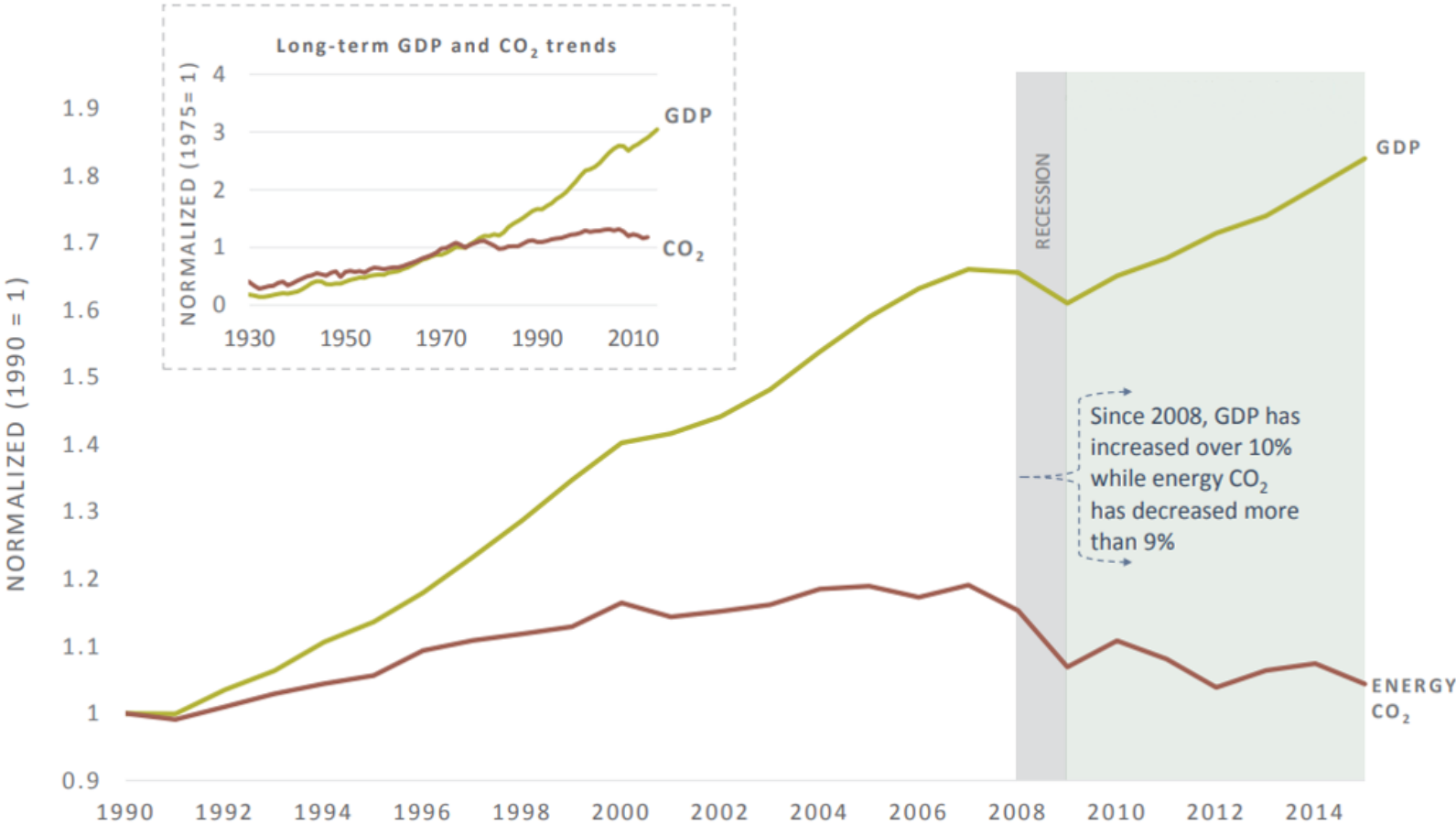
Image Source: Arnold Boissou, Getty, European SIF; December 2016.

# Drivers of Global Growth in Sustainable Investing

Policy + Regulation

Markets + Technology

Shifting Asset Owner Demographics



Source: GDP Data per U.S. Bureau of Economic Analysis; emissions data per Carbon Dioxide information Analysis Center and U.S. Energy Information Administration; US Mid-Century Strategy for Deep Decarbonization 2016

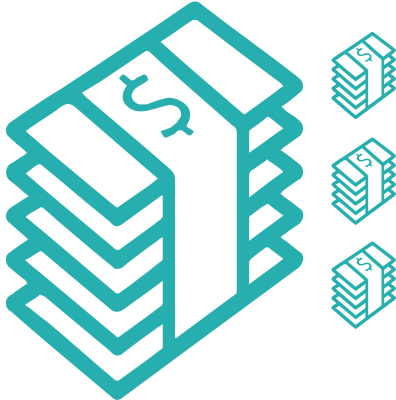
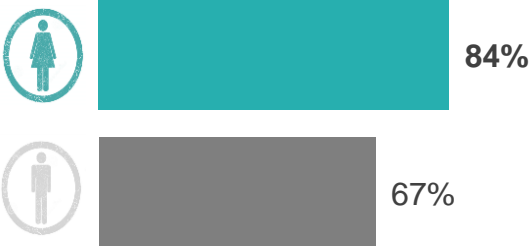
# Drivers of Global Growth in Sustainable Investing

Policy + Regulation

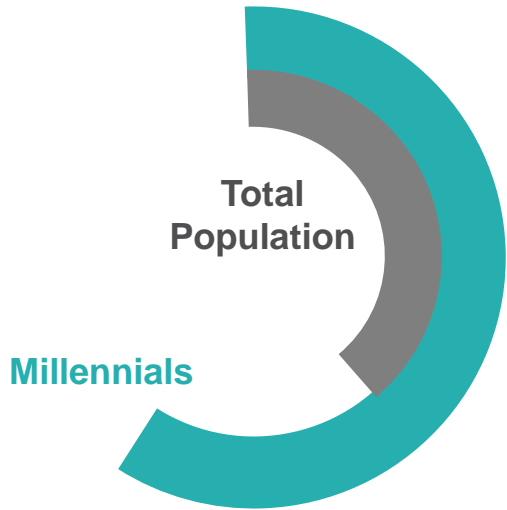
Markets + Technology

Shifting Asset Owner Demographics

Women are more likely to show interest in sustainable investing:



**\$30-40 trillion** transferred women & millennials to take place over the next few decades



**2x** Millennial investors are more likely as the overall investor population to invest in companies targeting social or environmental goals

Source: Morgan Stanley Institute for Sustainable Investing's 2017 Sustainable Signals: New Data from the Individual Investor; Accenture. "The 'Greater' Wealth Transfer – Capitalizing on the Intergenerational Shift in Wealth." June 2012; Accenture-CM-AWAMS-Wealth-Transfer-Final-June2012-Web-Version.pdf

# A Framework to Build a Sustainable Investing Portfolio

# Moving from Intention to Implementation



**Identify Risks and Opportunities**



**Know What You Own**



**Put Into Practice**

1

## Recognize the Risks and Opportunities

Industry Leaders Present Empirical Findings on ESG exposure

### Harvard Business School

“

We find that firms with good performance on material sustainability issues significantly outperform firms with poor performance on these issues, suggesting that investments in sustainability issues are shareholder-value enhancing. ”

*-Mozaffar Khan, George Serafeim, Aaron Yoon*

### AQR

“

ESG exposures may inform investors about the riskiness of the securities in a way that is complementary to what is captured by traditional statistical risk models ”

*-Jeff Dunn, Shaun Fitzgibbons, Lukasz Pomorski*

Sources: AQR Assessing Risk Through Environmental, Social and Governance Exposures 2017. HBS Corporate Sustainability: First Evidence to Materiality 2015.



1

## Recognize the Risks and Opportunities

ESG integration can signal future risks



### Widespread Data Breach Affecting Millions of Consumers Globally

MSCI ESG Research downgraded Equifax to **CCC**, the lowest possible rating, in **August 2016**, over a year in advance of Equifax's disclosure of the data breach that potentially affected 143 million customers.

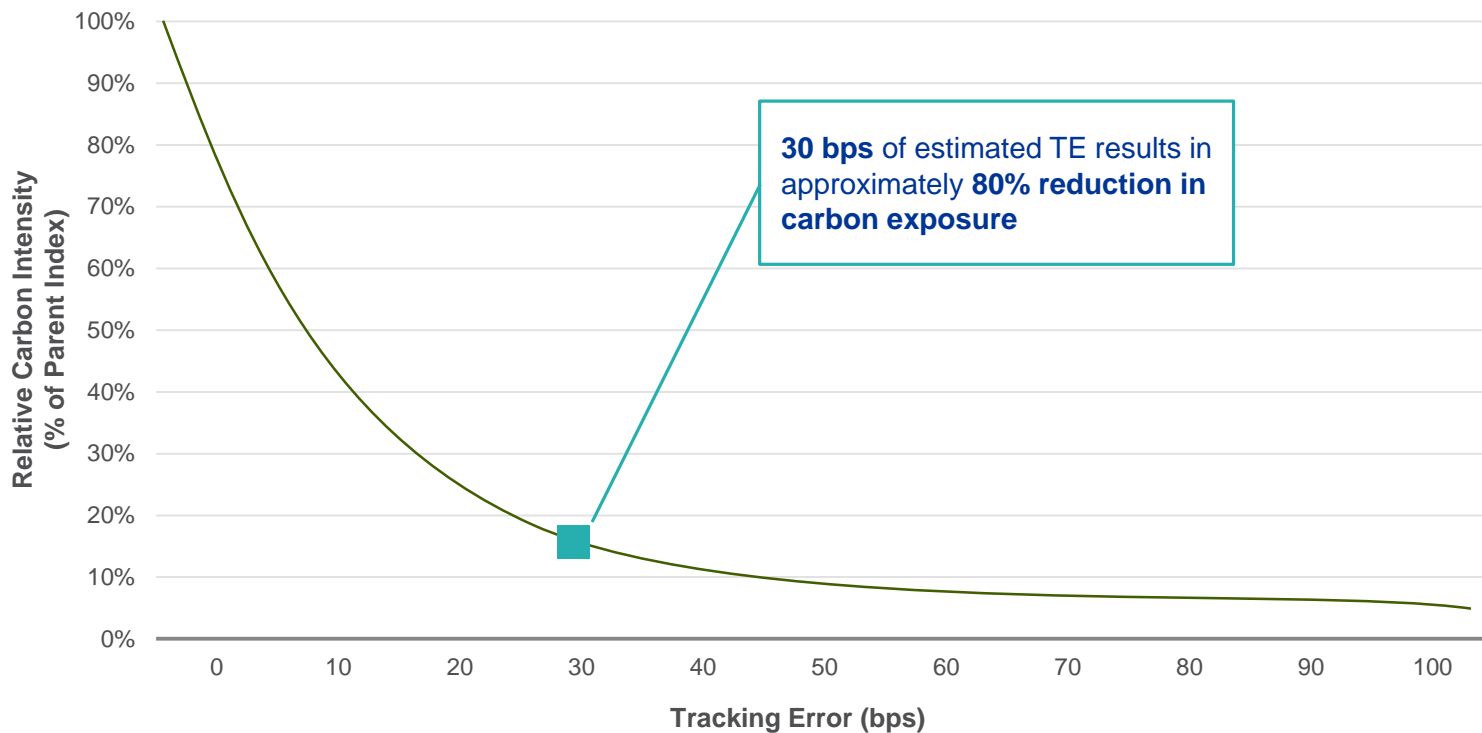
# 1

## Recognize the Risks and Opportunities

Low carbon can reduce climate risk within a performance risk budget

### Cutting down emissions by 80% within 30 bps tracking error

- A tracking error target of 30 bps seeks the optimal amount of carbon exposure reduction without outright excluding companies in the parent index
- A tracking error budget above 30 bps resulted in diminishing carbon reduction benefits




Source: MSCI, as of 6/30/17. For illustrative purposes only.

The iShares MSCI ACWI Low Carbon Target ETF may not reflect a lower carbon exposure as there is no guarantee that the underlying index will achieve its intended results or accurately assess an issuer's actual and potential carbon emissions. Past performance does not guarantee for future results. For standardized performance, see slide #16.

2

# Know what you own

Aladdin Risk reporting helps investors understand exposure to ESG factors

		Fund	Benchmark	Active
ESG	<b>ESG Coverage</b> <i>% Market Value</i>	99.0 %	99.8 %	
	<b>ESG Adjusted Score</b> <i>0 (worst) - 10 (best)</i>	7.0	5.3	2.2
	<b>Environment Score</b> <i>0 (worst) - 10 (best)</i>	7.0	6.0	1.0
	<b>Social Pillar Score</b> <i>0 (worst) - 10 (best)</i>	5.7	4.7	1.0
	<b>Governance Score</b> <i>0 (worst) - 10 (best)</i>	4.2	3.8	0.4
				
Carbon		Fund	Benchmark	Active
	<b>Emissions Financed - Latest</b> <i>(metric tonnes / \$ million total capital)</i>	85	121	-35
	<b>Emissions Intensity - Latest</b> <i>(metric tonnes / \$ million total sales)</i>	76	136	-60

\*For illustrative purposes only. Metrics do not represent an actual product, fund, or portfolio.

# 3

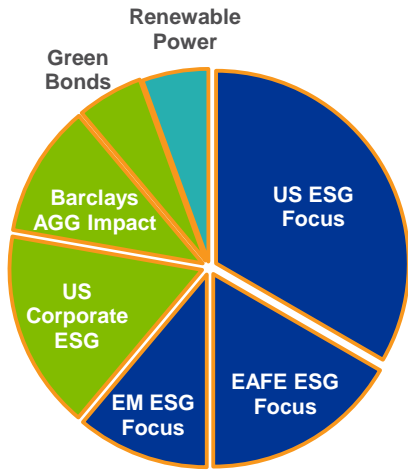
## Put it into Practice

### Incorporating sustainable investment strategies

**Institutional clients incorporate sustainable strategies into their overall investment program in various ways:**

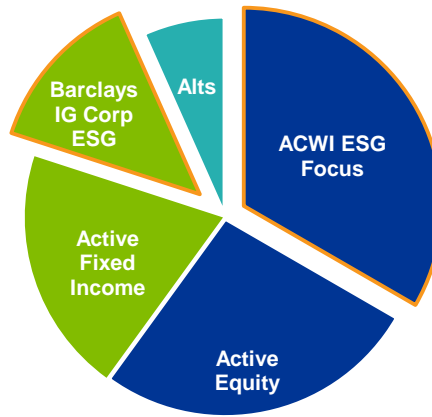
#### Broad allocation

Take total portfolio view on sustainability



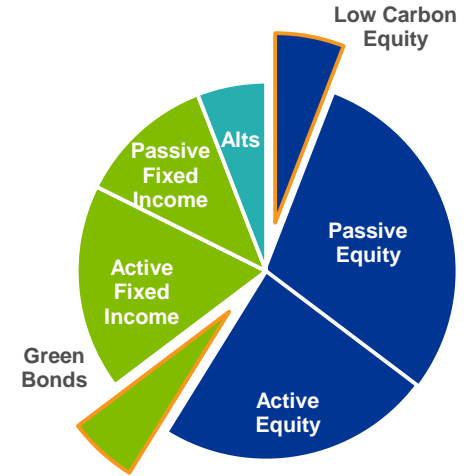
#### Index replacement

Substitute traditional passive solutions with sustainable investments



#### Carve out

Allocate a portion of an asset class to sustainable investments



Asset allocations are shown for illustrative purposes only

# Appendix

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# Important information regarding iShares ETFs

Fees as of Current Prospectus. All Other Data as of 6/30/17

Fund Name	Fund Inception Date	Gross Expense Ratio	30-Day SEC Yield (With /	1-Year Returns		5-Year Returns		10-Year Returns		Since Inception	
				NAV	Mkt Price	NAV	Mkt Price	NAV	Mkt Price	NAV	Mkt Price
iShares MSCI ACWI Low Carbon Target ETF (CRBN)	12/8/2014	0.20%	1.98%	19.23%	19.45%	--	--	--	--	6.58%	6.80%

# Important Notes

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## **Forward Looking Information**

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# Important Notes

## Index

It is not possible to directly invest in an unmanaged index.

## Risk

Investing in the bond market is subject to certain risks including market, interest-rate, issuer, credit, and inflation risk. Equities may decline in value due to both real and perceived general market, economic, and industry conditions. Mortgage and asset-backed securities may be sensitive to changes in interest rates, subject to early repayment risk, and while generally backed by a government, government-agency or private guarantor there is no assurance that the guarantor will meet its obligations. High-yield, lower-rated, securities involve greater risk than higher-rated securities; portfolios that invest in them may be subject to greater levels of credit and liquidity risk than portfolios that do not. Investors will, at times, incur a tax liability. Income from municipal bonds may be subject to state and local taxes and at times the alternative minimum tax. Derivatives may involve certain costs and risks such as liquidity, interest rate, market, credit, management and the risk that a position could not be closed when most advantageous. Investing in derivatives could lose more than the amount invested.

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# Important Notes

**Carefully consider the Funds' investment objectives, risk factors, and charges and expenses before investing. This and other information can be found in the Funds' prospectuses or, if available, the summary prospectuses which may be obtained by visiting the [iShares ETF](#) and [BlackRock Fund](#) prospectus pages. Read the prospectus carefully before investing.**

## **Investing involves risk, including possible loss of principal.**

This material represents an assessment of the market environment as of the date indicated; is subject to change; and is not intended to be a forecast of future events or a guarantee of future results. This information should not be relied upon by the reader as research or investment advice regarding the funds or any issuer or security in particular.

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Fixed income risks include interest-rate and credit risk. Typically, when interest rates rise, there is a corresponding decline in bond values. Credit risk refers to the possibility that the bond issuer will not be able to make principal and interest payments. Non-investment-grade debt securities (high-yield/junk bonds) may be subject to greater market fluctuations, risk of default or loss of income and principal than higher-rated securities.

International investing involves risks, including risks related to foreign currency, limited liquidity, less government regulation and the possibility of substantial volatility due to adverse political, economic or other developments. These risks often are heightened for investments in emerging/developing markets or in concentrations of single countries.

The iShares MSCI ACWI Low Carbon Target ETF may not reflect a lower carbon exposure as there is no guarantee that the underlying index will achieve its intended results or accurately assess an issuer's actual and potential carbon emissions.

Funds that concentrate investments in specific industries, sectors, markets or asset classes may underperform or be more volatile than other industries, sectors, markets or asset classes and than the general securities market.

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## Sustainable Organization Affiliations

US(SIF)

The Forum for Sustainable and Responsible Investment

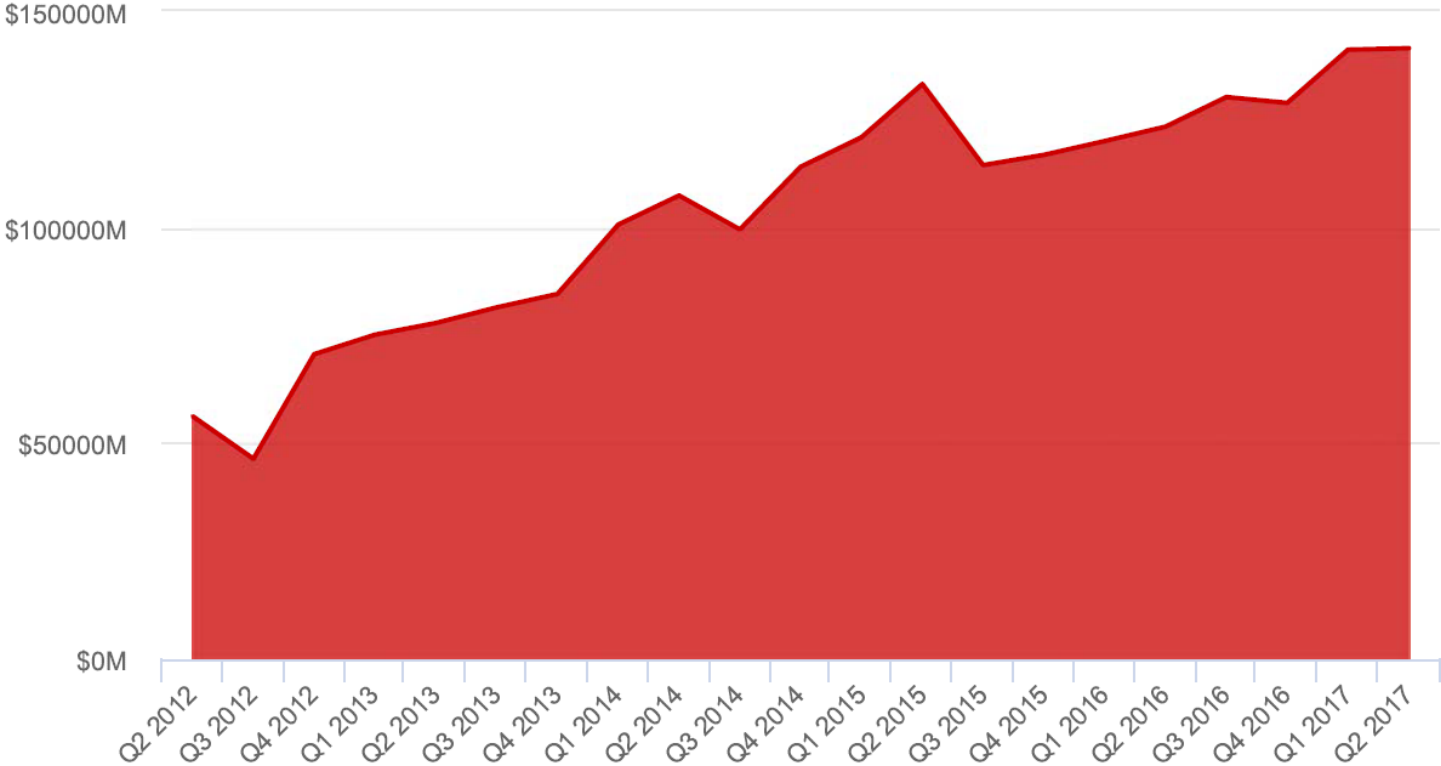
GIIN®  
MEMBER



The Green Bond Principles logo icon, which consists of three overlapping green leaf-like shapes of varying shades, with a white stylized human figure or hand shape in the center.  
The  
**Green Bond**  
Principles

The logo icon for the Principles for Responsible Investment (PRI), consisting of a 3x3 grid of blue squares of varying shades.  
**PRI** | Principles for  
Responsible  
Investment

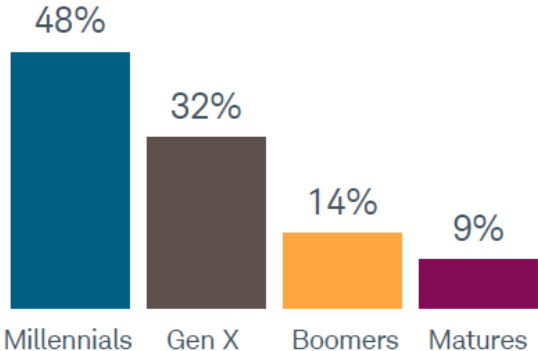
### U.S. Institutional and Retail ESG Assets 2012-2017



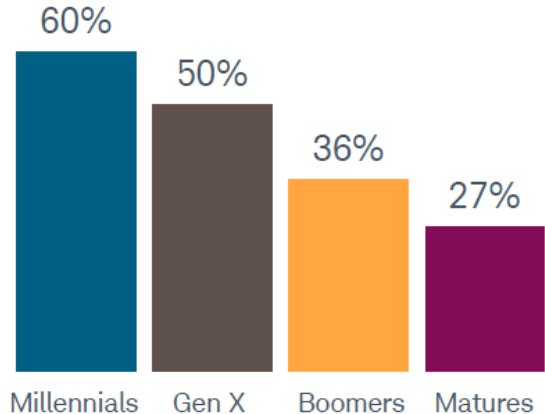
Source: Fundfire.com "Infographic: Everything You Need to Know about ESG"

## Statements that best describe you

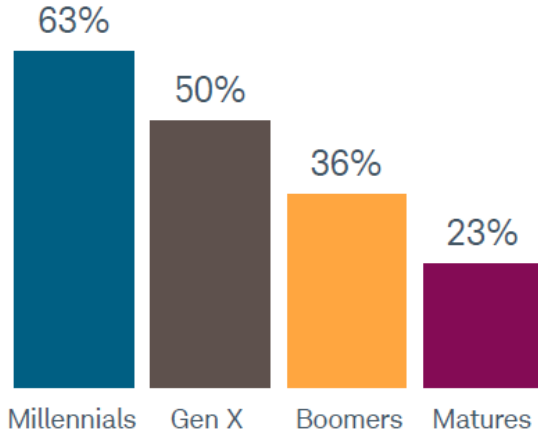
*I actively seek out funds that use SRI strategies*



*It is important to me to invest in socially responsible funds because I want my investments to align with beliefs / interests*

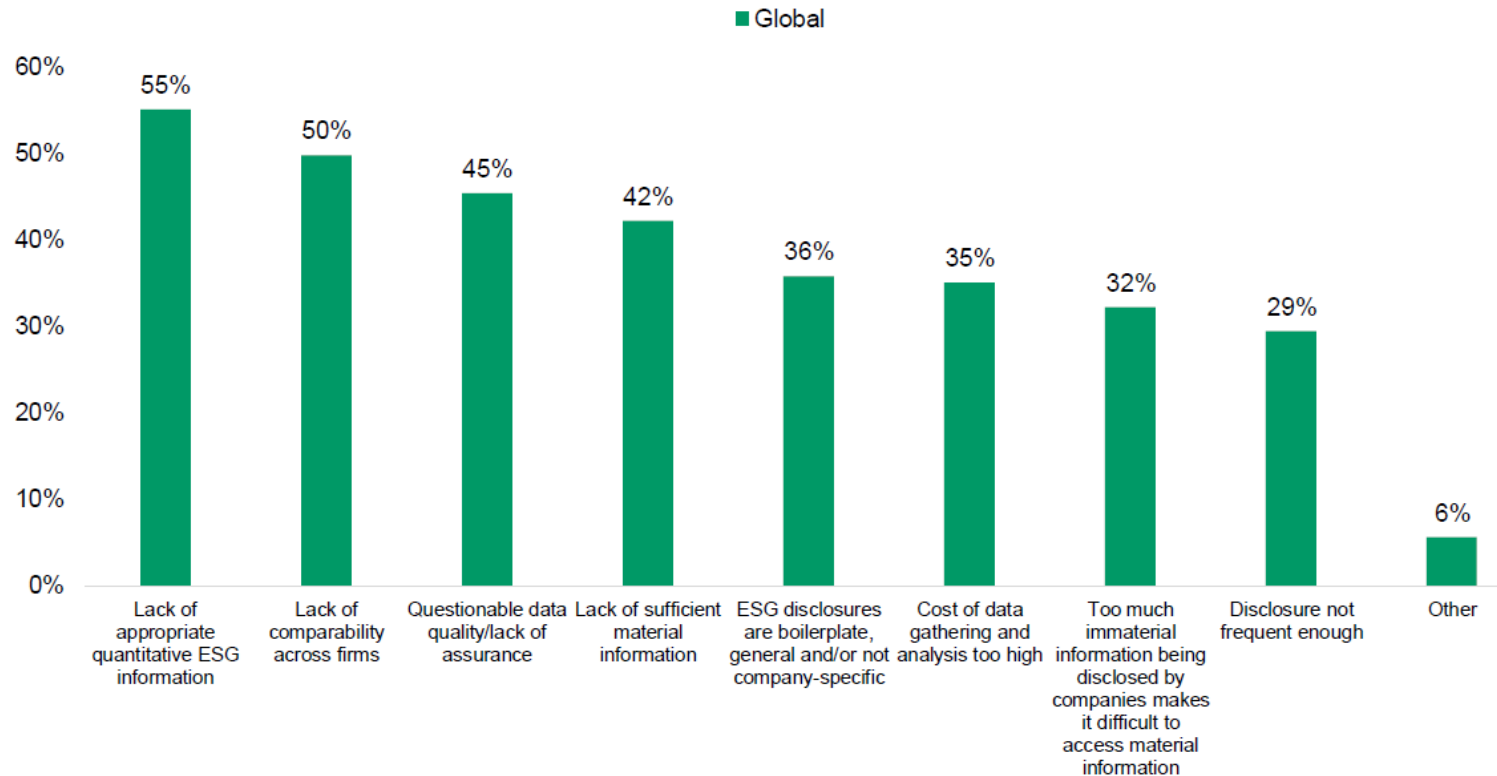


*I think SRI strategies can help me reach my investing goals*



Source: Charles Schwab; 2017 ETF Investor Study, September 2017

## What factors limit your organization's ability to use nonfinancial information in your investment decisions?



## Best Practices in Measuring and Monitoring Sustainable Practices

**Katie Schmitz Eulitt**  
Strategic Advisor  
Sustainable Accounting Standards Board





# The Sustainability Accounting Standards Board

Industry-Specific Standards to  
Guide Disclosure of Material ESG Factors to Investors

**Katie Schmitz Eulitt**

Strategic Advisor

Presentation to Sage Advisory's Sustainable Investing Roundup  
November 8, 2017

# The Sustainability Accounting Standards Board (SASB)

## Discussion Topics

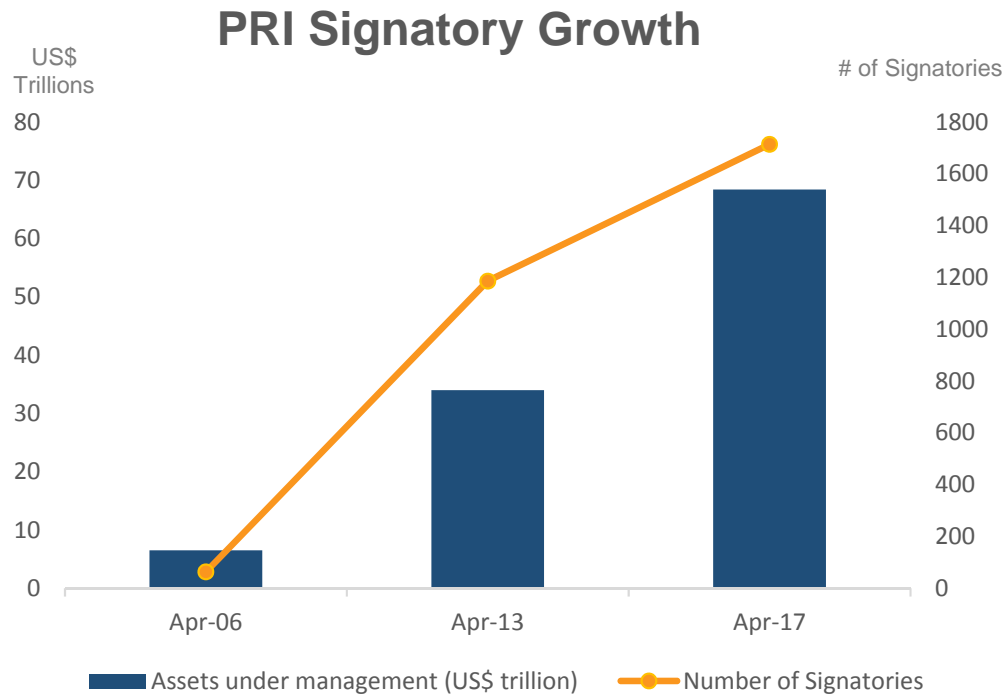
- 1 Growing Investor Interest in Sustainability
- 2 **SASB Overview**
- 3 Rigor of SASB's Standards Development Process
- 4 **SASB Insights and Tools for Investors**
- 5 Market Support for SASB





# Investor Focus on Sustainability

A rapidly increasing share of institutional assets are managed with ESG issues in mind



- PRI signatories represent ~50% of total global assets under management
- 90% of the world's top 100 asset managers, including Blackrock, Vanguard, SSGA, Fidelity Investments, Capital Investment Group, and PIMCO
- 359 asset owners, representing USD 16.3 trillion in assets

Source: PRI

## *All PRI signatories commit to\*:*

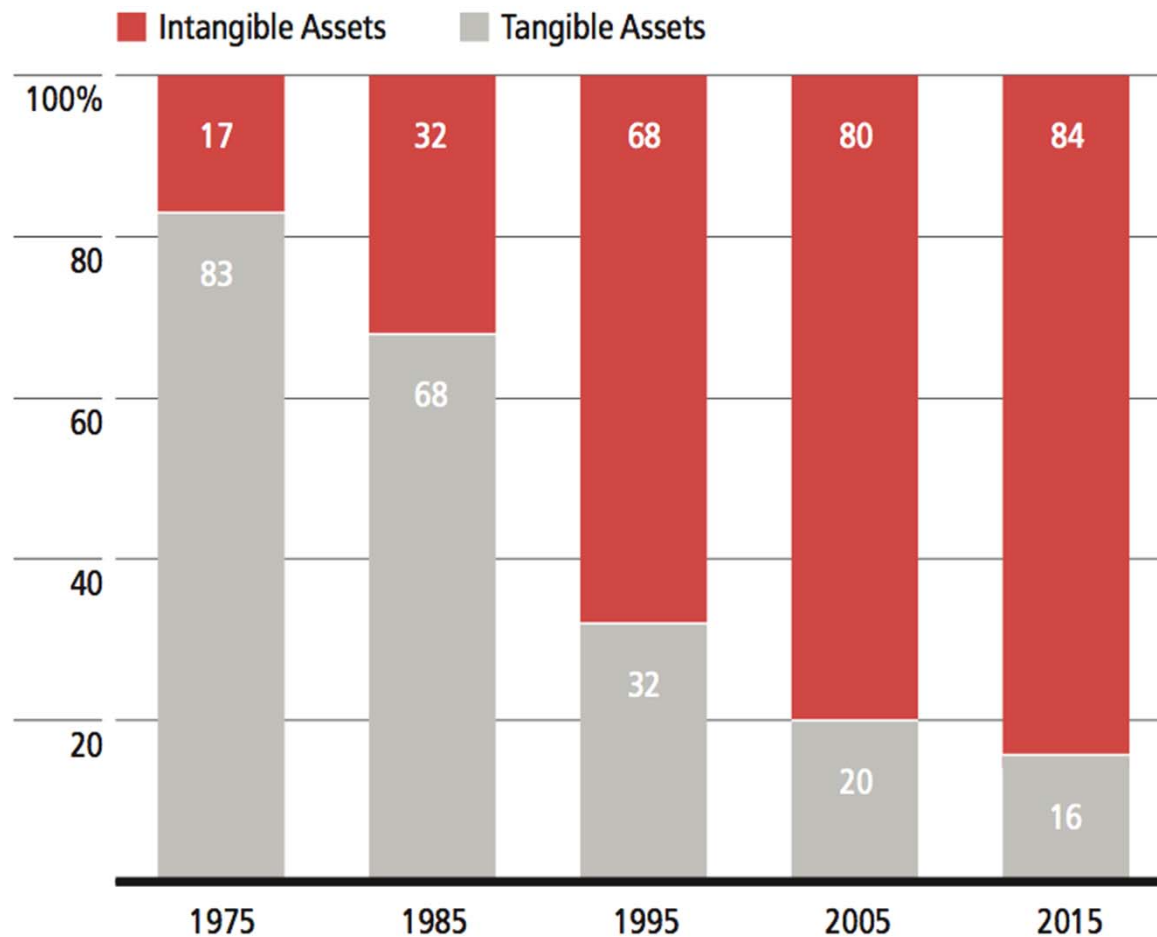
- Incorporate ESG issues into investment analysis and decision-making processes
- Be active owners and incorporate ESG issues into their ownership policies and practices
- Seek appropriate disclosure on ESG issues by the entities in which they invest

\*Reflects only three of six PRI Principles, to which all signatories commit.



# ESG Factors Can Influence Long-Term Risk and Returns

Changing nature of valuations requires broader information set to understand risk



Intangibles, such as intellectual capital, brand value, customer loyalty are increasing components of corporate valuations

Investors are exposed to risks from relatively infrequent, but high impact ESG-related events (e.g. safety incidents, ethics scandals, natural resource shortages)

ESG factors can give forward looking insight into performance and risk

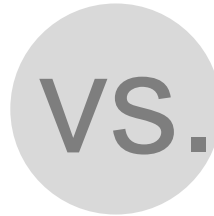
Source: Ocean Tomo, *Ocean Tomo's Intangible Asset Market Value Study*, January 2015.

# Pain Points for Investors

Investors are dissatisfied with the quality of ESG disclosure

## Investor Needs

Investor confidence in the quality of the ESG information received from issuers



## Issuer Reporting

Issuer confidence in the quality of the ESG information reported



Source: PwC, *ESG Pulse*, 2016.

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## High degree of investor dissatisfaction with the current state of ESG disclosure

	<u>% Investors Dissatisfied</u>
Disclosure of ESG-related risk/opportunity that could affect business models	<b>93%</b>
How sustainability risks/opportunities are identified and quantified in financial terms	<b>82%</b>
Ease of comparing peer companies based on ESG data disclosed	<b>92%</b>
Key performance indicators related to each identified material issue	<b>68%</b>
Use of standards for disclosure of ESG data to investors (50% want industry-specific)	<b>71%</b>

Sources: EY, *Is your non-financial performance revealing the true value of your business*, 2017; PwC, *Sustainability Goes Mainstream*, May 2014; *ESG Pulse*, 2016.



# SASB Overview

Industry-specific standards to guide disclosure of material ESG factors to investors

The SASB creates industry-specific sustainability accounting standards.

SASB standards:

- Help companies disclose financially material, decision-useful ESG information to investors in a cost-effective way
- Reduce information asymmetry
- Enable performance benchmarking across companies
- Facilitate more accurate pricing of risk



## Facts about SASB

- Independent standards setter led by nine-member standards board
- Follows rigorous, evidence-based, market-informed process
- Maintains industry-specific standards for 79 industries in 11 sectors
- Designed for use in public, annual financial reports targeted to investors
- Guided by a strong conceptual framework grounded in financial materiality
- Operated under the auspices of the SASB Foundation, a non-profit organization



# The SASB Foundation Board

Fiduciary duty to oversee the funding and operations of the SASB and staff

## Michael R. Bloomberg – Chair

Philanthropist, Founder of Bloomberg LP,  
and the 108<sup>th</sup> Mayor of New York City

## Mary Schapiro – Co Vice Chair

Promontory Advisory Board Vice Chair  
Former Chairman – SEC

## Robert K. Steel – Co Vice Chair

Partner & CEO  
Perella Weinberg Partners

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## Alan Beller

Senior Counsel  
Cleary Gottlieb Steen & Hamilton

## Shawn Lytle

President  
Delaware Management Holdings, Inc.

## Laura Tyson, PhD

Director, Institute for Business  
and Social Impact  
Berkeley Haas School of Business

## Audrey Choi

CEO – Institute for Sustainable  
Investing, Morgan Stanley

## Jim McIntire

Former Treasurer, State of Washington

## Elisse Walter, JD

Former Chairman – SEC

## Jack Ehnes

CEO – CalSTRS

## Clara Miller

President – The F.B. Heron Foundation

## Matthew Welch

President,  
SASB (Ex-officio)

## Steven O. Gunders, CPA, MBA

Partner  
Deloitte & Touche LLP (Retired)

## Catherine Odelbo, MBA

Executive Vice President Corporate Strategy  
and Partnerships – Morningstar Inc.

## Jay Willoughby

CIO, TIFF

## Robert H. Herz

Former Chairman – FASB

## Kevin Parker

CEO – SICM

## Chuck Zegar

Philanthropist, Co-Founder  
of Bloomberg LP

## Curtis Ravenel

Global Head, Sustainable Business and  
Finance – Bloomberg LP



# The Sustainability Accounting Standards Board

Independent board responsible for all aspects of standards setting

## **Jean Rogers, PhD, PE**

The SASB Chair

Founder and CEO of SASB 2011-2017

*Sector Chair for Infrastructure*

## **Jeffrey Hales, PhD**

The SASB Vice Chair

Professor, Georgia Institute of Technology –

Ernest Scheller Jr. College of Business

*Sector Chair for Financials*

## **Verity Chegar**

Vice President and ESG Strategist,  
BlackRock

*Sector Chair for Extractives & Minerals  
Processing*

## **Lloyd Kurtz, CFA**

Senior Portfolio Manager, Head of Social Impact Investing,  
Wells Fargo Private Bank

*Sector Chair for Health Care & Resource Transformation*

## **Robert Hirth, Jr.**

Chairman, Committee of Sponsoring  
Organizations of the Treadway  
Commission (COSO)

Senior Managing Director, Protiviti

*Sector Chair for Technology &  
Communications*

## **Daniel (Dan) L. Goelzer, JD**

Senior Counsel, Baker & McKenzie LLP, Inc.

*Sector Chair for Services*

## **Elizabeth Seeger**

Director, KKR

*Sector Chair for Consumer Goods*

## **Kurt Kuehn**

Former CFO, UPS

*Sector Chair for Transportation*

## **Stephanie Tang, JD**

Senior Corporate Counsel and Assistant Corporate  
Secretary, the Clorox Company

*Sector Chair for Food & Beverage and Renewable  
Resources & Alternative Energy*



# The SASB Difference

SASB standards are created for the market, by the market



# The SASB Lens on Financial Materiality

Standards targeted to the needs of investors for financially relevant ESG information



## SASB Standards

Identify ESG factors reasonably likely to affect the *financial condition or operating performance* of companies within an industry

Are acknowledged by the EU as a framework for use to provide information pursuant to *Directive 2014/95/EU* on non-financial reporting.

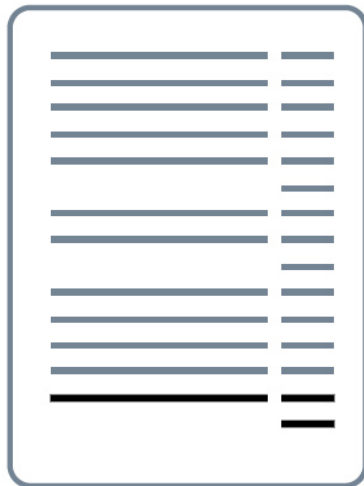
Can be used to guide disclosure of material information to investors in filings with the US SEC in Forms 10-K, 20-F and 40-F.



# Designed for Integration into Public, Annual Reports to Investors

Meet investor needs for comparable, consistent, reliable data

## Financial Accounting Standards

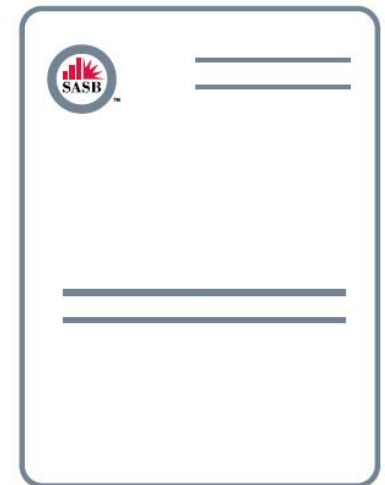


US Generally Accepted Accounting Principles (GAAP) or International Financial Reporting Standards (IFRS) govern presentation of the financial statements

## Annual Report to Investors



- Annual Reports
- Integrated Reports
- US SEC Forms 10-K, 20-F, and 40-F
- Other public reports to investors



SASB Disclosure Topics and Metrics designed to guide management's discussion and analysis, risk factor analysis, strategic analysis as appropriate



# Rigor of SASB's Standards Development Process



# Industries Grouped by Resource Intensity & Sustainability Impacts

Sustainable Industry Classification System (SICS™): 79 industries within 11 sectors

## Health Care

- Biotechnology & Pharmaceuticals
- Medical Equipment & Supplies
- Health Care Delivery
- Health Care Distributors
- Managed Care
- Drug Retailers



## Financials

- Commercial Banks
- Investment Banking & Brokerage
- Asset Management & Custody Activities
- Consumer Finance
- Mortgage Finance
- Security & Commodity Exchanges
- Insurance



## Technology & Communications

- Electronic Manufacturing Services & Original Design Manufacturing
- Software & IT Services
- Hardware
- Semiconductors
- Telecommunication Services
- Internet Media & Services



## Extractives & Minerals Processing

- Oil & Gas – Exploration & Production
- Oil & Gas – Midstream
- Oil & Gas – Refining & Marketing
- Oil & Gas – Services
- Coal Operations
- Iron & Steel Producers
- Metals & Mining
- Construction Materials



## Transportation

- Automobiles
- Auto Parts
- Car Rental & Leasing
- Airlines
- Air Freight & Logistics
- Marine Transportation
- Cruise Lines
- Rail Transportation
- Road Transportation



## Services

- Education
- Hotels & Lodging
- Casinos & Gaming
- Leisure Facilities
- Advertising & Marketing
- Media & Entertainment
- Professional & Commercial Services



## Resource Transformation

- Chemicals
- Aerospace & Defense
- Electrical & Electronic Equipment
- Industrial Machinery & Goods
- Containers & Packaging



## Renewable Resources & Alternative Energy

- Biofuels
- Solar Technology & Project Developers
- Wind Technology & Project Developers
- Fuel Cells & Industrial Batteries
- Forestry & Paper
- Pulp & Paper Products



## Food & Beverage

- Agricultural Products
- Meat, Poultry & Dairy
- Processed Foods
- Non-Alcoholic Beverages
- Alcoholic Beverages
- Tobacco
- Food Retailers & Distributors
- Restaurants



## Consumer Goods

- Household & Personal Products
- Multiline and Specialty Retailers & Distributors
- Drug Retailers & Convenience Stores
- E-Commerce
- Apparel, Accessories & Footwear
- Building Products & Furnishings
- Appliance Manufacturing
- Toys & Sporting Goods



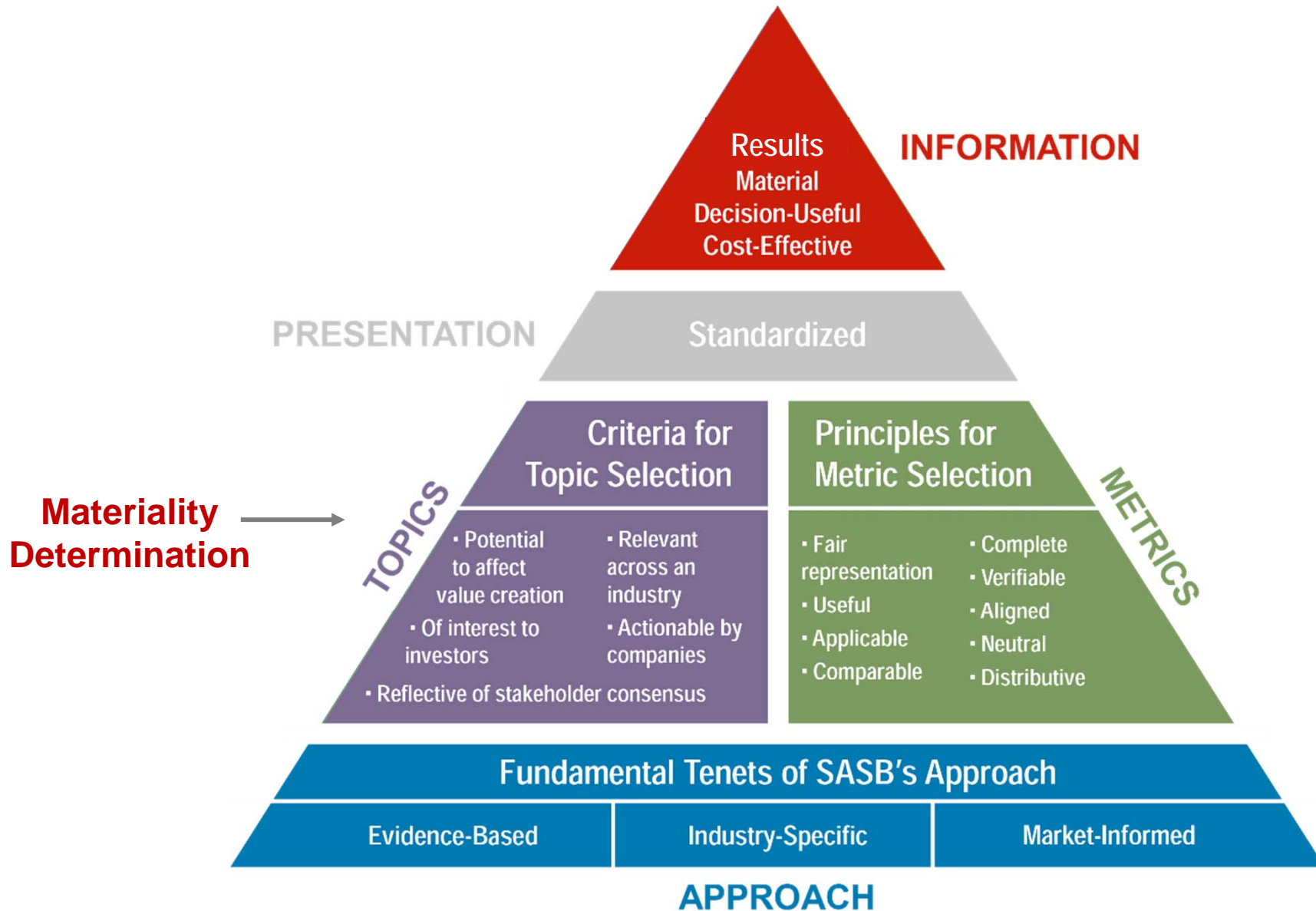
## Infrastructure

- Electric Utilities & Power Generators
- Gas Utilities & Distributors
- Water Utilities & Services
- Waste Management
- Engineering & Construction Services
- Home Builders
- Real Estate Real Estate Services



# SASB's Conceptual Framework Guides Standards Development

Clear criteria govern disclosure topic and metric selection



# Evaluation of the Materiality of Sustainability Issues in Each Industry

SASB's research process starts with a broad universe of sustainability issues

## Environment

- GHG emissions
- Air quality
- Energy management
- Water and wastewater management
- Waste and hazardous materials management
- Ecological impacts
- Climate impacts

## Social capital

- Community relations
- Human rights
- Access and affordability
- Customer welfare
- Data privacy & security
- Selling practices & product labelling

## Human capital

- Labor relations
- Labor practices & compensation
- Employee health, safety, and wellbeing
- Employee recruitment, engagement & diversity

## Business model and innovation

- Product design & lifecycle management
- Product packaging & distribution
- Product quality and safety
- Supply chain management
- Materials sourcing
- Investment, credit, & underwriting ESG risks
- Rate structure & pricing
- Business model resilience

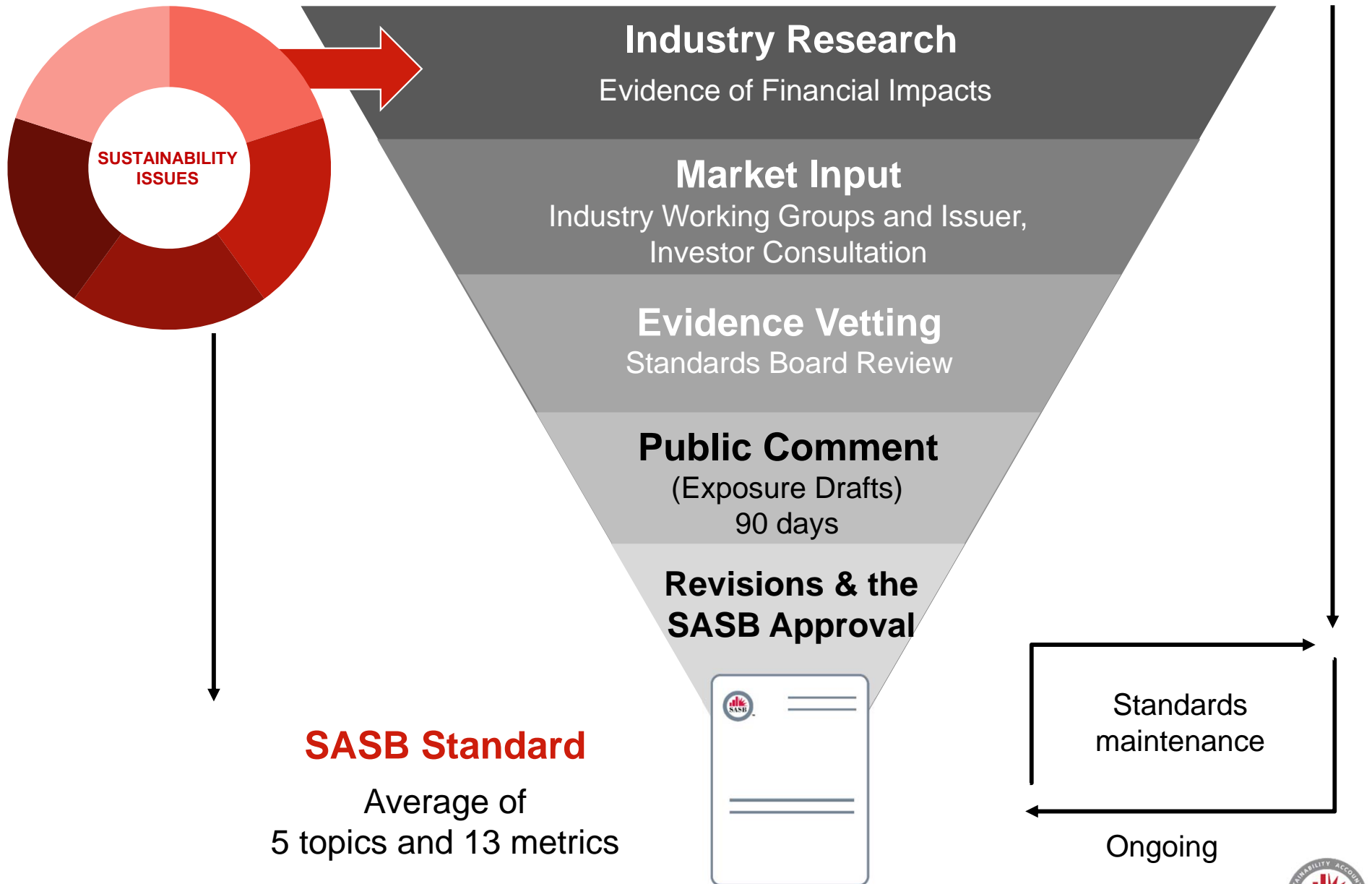
## Leadership and governance

- Business ethics
- Competitive behavior
- Management of legal & regulatory environment
- Critical incident risk management
- Systemic risk management



# Rigorous Process Drives SASB Standards

Standards for each industry are rooted in evidence and shaped by market input



# Balanced Participation

SASB's standards-setting process is inclusive & informed by industry expertise

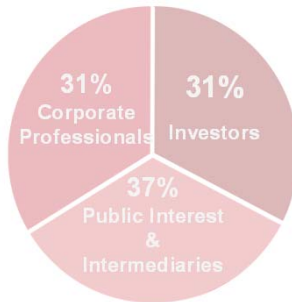
## Industry Working Group Participation



2012-2016

Provisional Phase

**>2,800**  
PARTICIPANTS



**\$23.4T**

ASSETS UNDER MANAGEMENT

**\$11.0T**

MARKET CAPITALIZATION

## Consultation Participation



2016-2017

Consultative Phase

**141 Companies**

159 INDUSTRY CONSULTATIONS

**19 Industry Associations**

REPRESENTING HUNDREDS OF COMPANIES

**38 Institutional Investors**

271 INDUSTRY CONSULTATIONS

## Standing Sector Advisory Group Input



2018-onward

Standards Maintenance

**11 Standing Sector Advisory Groups**

**12-15 members in each group**  
MEMBERS REPRESENTING ISSUERS & INVESTORS

# Expected Value Drivers

SASB's process identifies disclosure topics with evidence of impact on financial condition, operating performance or risk

**Financial Impact**

REVENUE

COST

ASSETS & LIABILITIES

COST OF CAPITAL

**Types of Financial Drivers**

Demand for Core Products and Services

Intangible Assets and Long-Term Growth

Operational Efficiency/Cost Structure

Valuation of Core Assets and Liabilities

Governance, License to Operate and Risk

**Disclosure Topics Examples**

Drug safety and side effects

Diverse workforce in technology

Energy-efficient chemicals production

Stranded coal assets

Operational safety of gas pipelines



# Robust Standards Designed to Provide Decision-Useful Information

SASB standards contain industry-specific disclosure topics, metrics, and guidance

Table 1. Material Sustainability Topics Accounting Metrics

TOPIC	ACCOUNTING METRIC
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under a regulatory program, percentage by hydrocarbon resource
	Amount of gross global Scope 1 emissions from: (1) combustion, (2) flared hydrocarbons, (3) process emissions, (4) directly vented releases, and (5) fugitive emissions/leaks
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets
Air Quality	Air emissions for the following pollutants: NO <sub>x</sub> (excluding N <sub>2</sub> O), SO <sub>x</sub> , volatile organic compounds (VOCs), and particulate matter (PM)
Water Management	Total fresh water withdrawn, percentage recycled, percentage in regions with High or Extremely High Baseline Water Stress
	Volume of produced water and flowback generated:

Accounting metrics for each disclosure topic

Industry-specific disclosure topics

## Reserves Valuation & Capital Expenditure

### Description

Estimates suggest that E&P companies are unlikely to be able to extract a significant probable oil and gas reserves if GHG emissions are to be controlled to limit global temperature increases to 1.5 degrees Celsius. Companies with more carbon-intensive reserves and production are likely to face greater risks. Regulatory limits on GHG emissions, together with improved energy technologies, could lower or reduce the growth in global demand, and therefore gas products. Extraction costs could increase with regulations that put a price on carbon. Regulatory actions that affect the net present value of oil and gas reserves. Regulatory actions that affect the net present value of oil and gas reserves. Regulatory actions that affect the net present value of oil and gas reserves. Stewardship of capital resources and production decisions that take into account related to climate change mitigation actions can help prevent current asset impairment and creditworthiness.

### Accounting Metrics

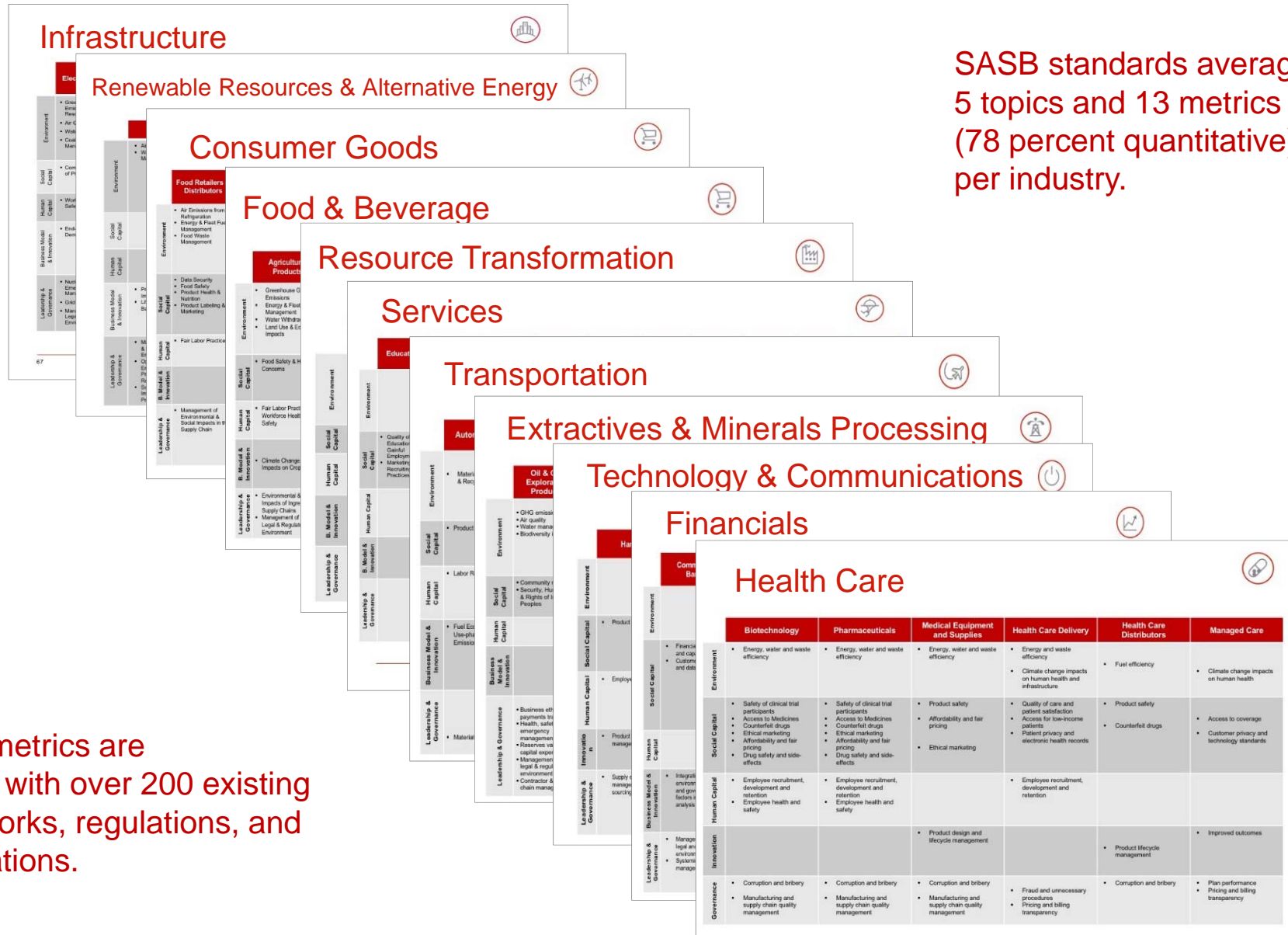
NR0101-22. Sensitivity of hydrocarbon reserve levels to future price projections and a price on carbon emissions

Technical protocol for compiling data; activity metrics for normalization



# Efficient and Cost-Effective Disclosures

SASB provides a cost-effective way to report on material sustainability topics



SASB standards average 5 topics and 13 metrics (78 percent quantitative) per industry.

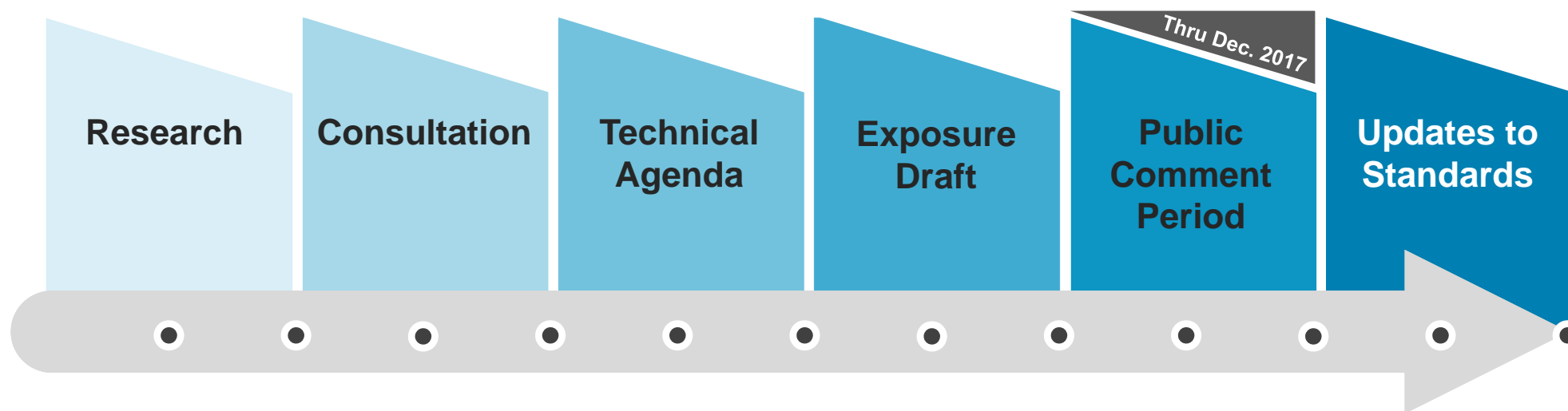
SASB metrics are aligned with over 200 existing frameworks, regulations, and certifications.



# Ongoing Standards Development Process

SASB standards will be maintained to evolve along with the markets they serve

## 3 YEAR PROCESS



### The SASB Oversight and Decision-Making

- Quarterly meetings of the Sustainability Accounting Standards Board
- Board meetings are public. Board meeting information is available on <https://www.sasb.org/sectors/public-meetings-sasb/>
- General comment letters can be sent to [comments@sasb.org](mailto:comments@sasb.org); comments on standards can be made through <https://www.sasb.org/standards/exposure-drafts/>

# SASB Disclosure Topics are in the News Everyday

Material ESG issues are mainstream business issues



## AUTO PARTS

TRANSPORTATION SECTOR

TOPIC:  
Product Safety

U.S indicts three Takata executives, fines company \$1 billion in air-bag scandal



## CRUISE LINES

SERVICES SECTOR

TOPIC:  
Discharge Management

Carnival Princess to pay record \$40 million for pollution cover-up



## PROFESSIONAL SERVICES

SERVICES SECTOR

TOPIC:  
Professional Integrity

Moody's Reaches \$864 Million Subprime Ratings Settlement



## INTERNET MEDIA & SERVICES

TOPIC:  
Data Privacy

*Data Could be the Next Tech Hot Button for Regulators*



## AUTOMOBILES

TRANSPORTATION SECTOR

TOPIC:  
Fuel Economy

*FBI arrests top Volkswagen executive in emissions scandal*



## PHARMACEUTICALS

HEALTH CARE SECTOR

TOPIC:  
Affordability & Fair Pricing

How Valeant Cashed in Twice on Higher Drug Prices



## RESTAURANTS

SERVICES SECTOR

TOPIC:  
Food Safety

Chipotle Customers Haven't Forgotten the Chain's Food Safety Crisis



## RESTAURANTS

SERVICES SECTOR

TOPIC:  
Fair Labor Practices

McDonald's agrees to \$3.7M deal with California workers

# Materiality Approach Validated by External Research

Harvard research supports SASB's standards-development process

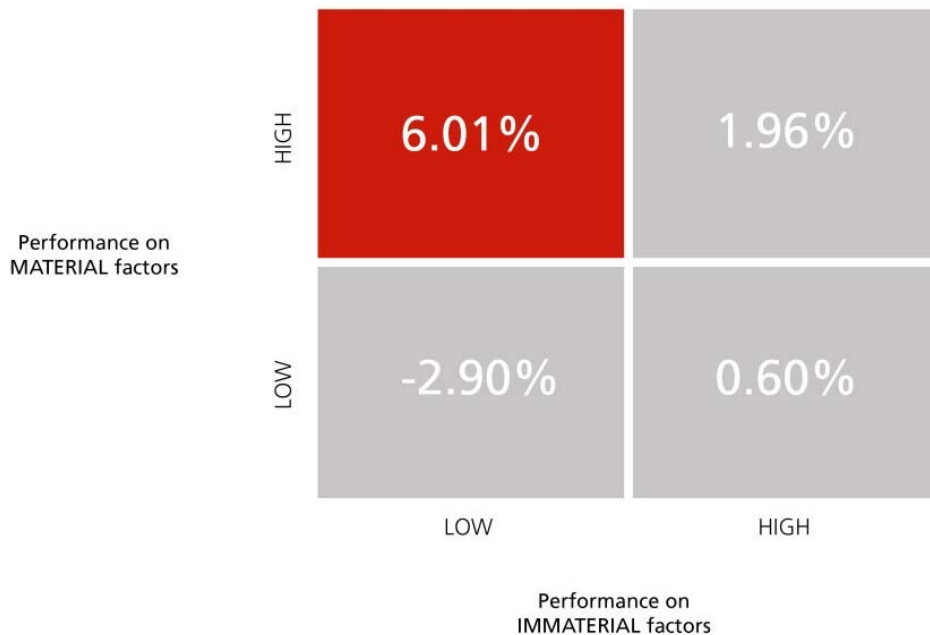


## “Corporate Sustainability: First Evidence on Materiality,”

Mozaffar Khan, George Serafeim, and Aaron Yoon

*The Accounting Review*, Vol. 91, No. 6 (Nov. 9, 2016)

Stock Returns (in annualized alpha) by Type of Sustainability Performance



- Using SASB's framework, Harvard researchers found that **firms with good performance on *material* sustainability issues enjoy the strongest financial returns.**
- They also found that 80 percent of disclosures have no correlation to positive financial performance.



# SASB Insights and Tools for Investors





# SASB's Materiality Map™

A first view of exposure to material sustainability risks across a diversified portfolio



## SASB Materiality Map™

SASB's Materiality Map identifies likely material sustainability issues on an industry-by-industry basis. This map serves as a snapshot of likely material sustainability issues at the time of our initial analysis and may be subject to change as issues and industries are ever-evolving. Click on a highlighted cell at the sector-level and then on any highlighted cell at the industry-level to see suggested accounting metrics and additional information for each issue.

### Sector Level Map

- Issue is likely to be material for more than 50% of companies in the industry
- Issue is likely to be material for less than 50% of companies in the industry
- Issue is not likely to be material for any of the companies in the industry

### Industry Level Map

- Not likely a material issue for companies in the industry
- Likely a material issue for companies in the industry

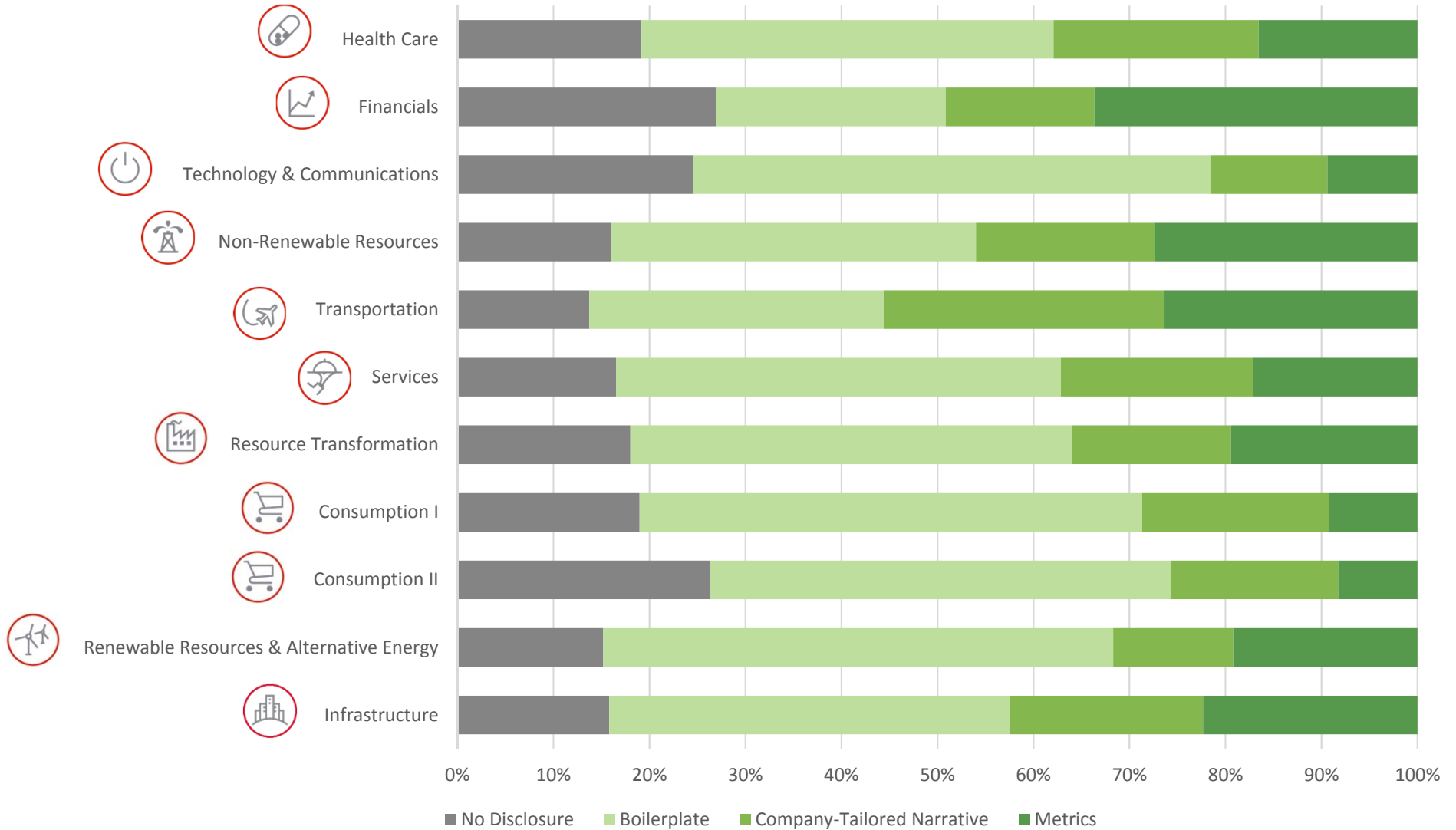
ISSUES	Health Care						Financials	Technology and Communications	Non-Renewable Resources	Transportation	Service
	Biotechnology	Pharmaceuticals	Medical Equipment and Supplies	Health Care Delivery	Health Care Distribution	Managed Care	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand
<b>Environment</b>											
GHG emissions											
Air quality											
<b>Energy management</b>											
Fuel management											
Water and wastewater management											
Waste and hazardous materials management											
Biodiversity impacts											
<b>Social Capital</b>											
Human rights and community relations											
Access and affordability											
Customer welfare											
Data security and customer privacy											
Fair disclosure and labeling											
Fair marketing and advertising											
<b>Human Capital</b>											
Labor relations											
Fair labor practices											
Employee health, safety and wellbeing											
Diversity and inclusion											
Compensation and benefits											
Recruitment, development and retention											
<b>Business Model and Innovation</b>											
Lifecycle impacts of products and services											
Environmental, social impacts on assets & operations											
Product packaging											
Product quality and safety											
<b>Leadership and Governance</b>											
Systemic risk management											
Accident and safety management											
Business ethics and transparency of payments											
Competitive behavior											
Regulatory capture and political influence											



# Current State of Disclosure on SASB Topics

Opportunity to transform SEC disclosure from boilerplate to performance-based

State of Disclosure in Annual SEC Filings



Source: SASB analysis performed between May and August 2016 using the latest annual SEC Filings (i.e. Form 10-Ks and 20-Fs) for the top companies, by revenue, per SICS industry (maximum of 10 companies).





# SASB Standards Support Data Driven Investment Decisions

## SASB standards enable peer-to-peer comparisons and industry benchmarking

Illustrative

**SASB Metrics**

**Sustainability Fundamentals: Metals & Mining Industry**

Sector: NR | Industry: Metals & Mining | View: Company Compare

This view compares the company you have selected to other companies in the same industry. Click on the column heading to sort the report on any of the metrics shown.

Company Name & Ticker	Greenhouse Gas Emissions			Energy Management		Water Management		Waste & Hazardous Materials Management		Security, Human Rights, and Rights of Indigenous Peoples		Labor Relations		Workforce Health, Safety, and Well-Being	
	Gross Scope 1 Emissions <i>Millions of Metric Tons of CO2 equivalent</i>	Total Energy Consumption <i>Thousands of Megawatt Hours</i>	Electricity Used <i>Thousands of Megawatt Hours</i>	% Renewable Energy <i>%</i>	Total Water Use <i>Thousands of Cubic Meters</i>	% Water Use Recycled <i>%</i>	Total Weight of Tailings Waste <i>Thousands of Metric Tons</i>	% Recycled - Tailings Waste <i>%</i>	Proven Reserves, Areas of Conflict <i>Millions of Metric Tons</i>	Proven Reserves, Indigenous Land <i>Millions of Metric Tons</i>	% of Workforce Collective Bargaining <i>%</i>	Number of Strikes / Lockouts <i>Number</i>	MSHA All-Incidence Rate <i>Rate</i>	Fatality Rate <i>Rate</i>	
Mineco International (MNCO)	19.8	120,278.0	60,278.0	37.6	991,000.0	26.6	138,000.0	42.0	4.50	7.0	72.00	1.0	0.4	0.0189	
Bauxiton Inc. (BXN)	20.7	92,500.0	27,222.0	9.0	499,200.0	31.9	151,000.0	37.0	1.40	3.3	54.00	0.0	0.8	0.0139	
Keystone Resources (KSR)	14.3	56,389.0	16,111.0	25.0	1,928,800.0	82.0	70,000.0	15.0	0.35	2.0	96.00	0.0	0.4	0.0005	
Alumont (ALO)	24.2	123,084.0	50,878.0	27.3	96,300.0	-	-	-	-	-	61.7	1.0	1.1	0.0317	
TexasChristi (TXC)	6.0	28,333.0	9,722.0	-	1,460,000.0	80.0	215,000.0	64.0	2.10	1.5	48.00	-	0.6	0.0120	
Weranda (WDA)	38.3	100,833.0	568.5	-	402,000.0	10.0	28,000.0	28.0	0.20	0.85	57.40	0.0	1.5	0.0062	
Montano Mining (MTO)	3.8	17,083.0	4,306.0	0.5	654,204.0	28.4	135,900.0	55.0	0.90	3.2	49.00	-	0.3	0.0044	
Industry Average	18.2	76,928.6	24,155.1	19.9	861,643.4	43.2	122,983.3	40.2	1.6	3.0	62.6	0.4	0.7	0.0125	
Industry Median	19.8	92,500.0	16,111.0	25.0	654,204.0	30.2	136,950.0	39.5	1.2	2.6	57.4	0.0	0.6	0.0120	

**Peer comparison**

**Complete data set**

**Consistent units**

**Benchmarking**



# Focus Investment Analysis on Material ESG Issues

Several data providers now provide a SASB “lens” on their ESG data

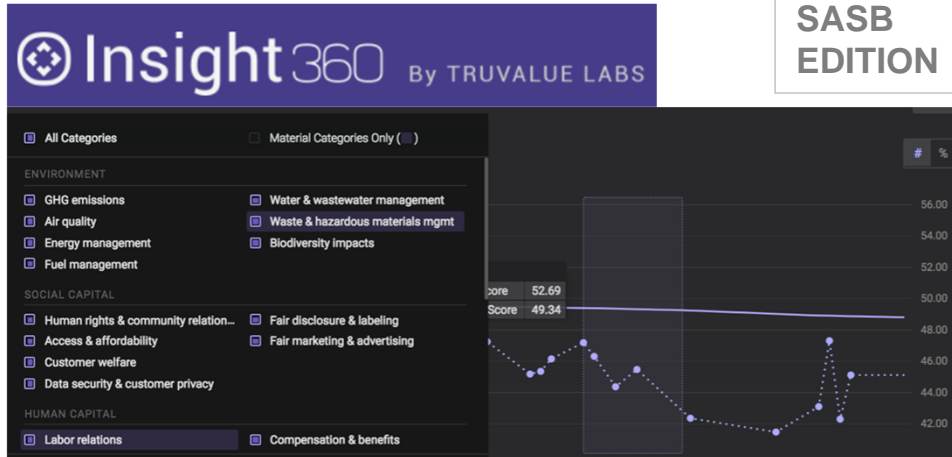
## Bloomberg

ESG DATA SNAPSHOT

Excel template displaying Bloomberg data for a company’s performance on SASB metrics

5 years of data  
(where available)

Bloomberg Function:  
XLTP XESG <GO>



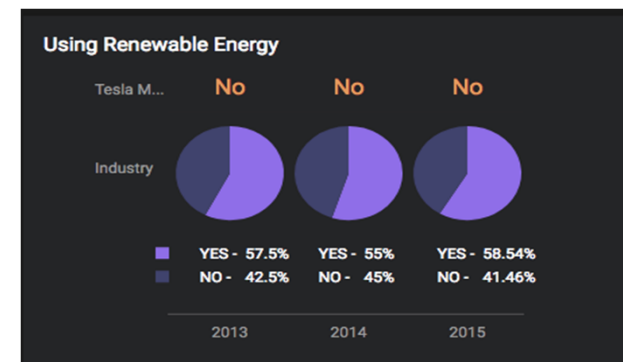
AI technology that filters, cleans, indexes, and scores unstructured data (e.g. news) about public companies in near real-time

Defaults to SASB’s material industry topics; also allows users to customize with all 30 general sustainability issue categories

Supplements static annual ESG data disclosures

THOMSON REUTERS  
**EIKON™**

SASB  
EDITION



Thomson Reuters data organized by a company’s performance on SASB metrics

Accessed via Insight 360 SASB Edition on Eikon

# Better Data, Better Decisions

SASB standards can power a variety of investor activities

- Data-driven corporate **engagement**
- Improve quality of **fundamental equity and credit analysis** by incorporating a broader information set
- **Construct alternative indexes** consisting of companies with strong performance on SASB's metrics
- Expand **risk reporting** to Boards to encompass sustainability risks in addition to traditional risk measures like volatility
- Develop a better understanding of sector-specific risks at the total fund level to inform **risk allocation and risk management**
- Improve understanding of systemic risks to guide **policy advocacy**



# Insight Across Multiple Asset Classes

SASB standards enable ESG integration across multiple asset classes

## PUBLIC EQUITIES

- Data-driven corporate engagement
- Input to fundamental equity analysis
- Construct alternative indexes

## CORPORATE FIXED INCOME

- Input to credit analysis and internal credit rating assignment
- Assess quality of disclosure for insight into risk

## PRIVATE EQUITY

- Identify focus areas for fund and portfolio company due diligence
- Report to GPs and LPs on performance on material ESG topics

## REAL ASSETS

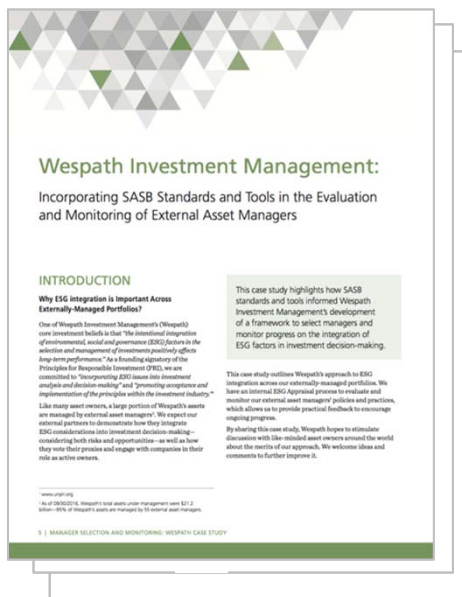
- Use SASB's Infrastructure sector standards to guide risk assessment and performance reporting for real assets

# Best Practices from Leading Investors

SASB ESG Integration Insights provides case studies on using SASB standards

Thought leadership series demonstrating use of SASB standards by institutional investors

## Case studies



## Webinars



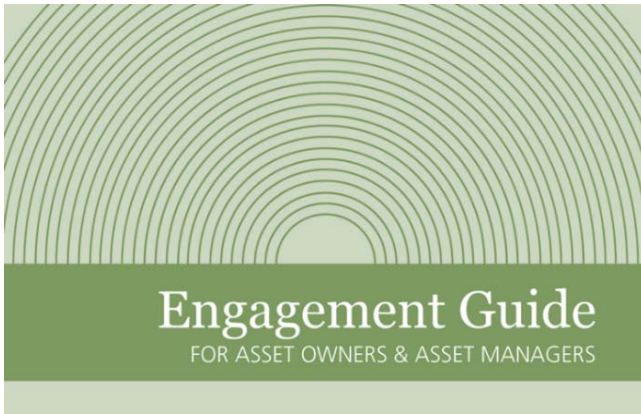
## Case studies compiled and published annually



\*ESG Integration Insights is available in the SASB Library at [www.sasb.org](http://www.sasb.org)

# Tools for Investors

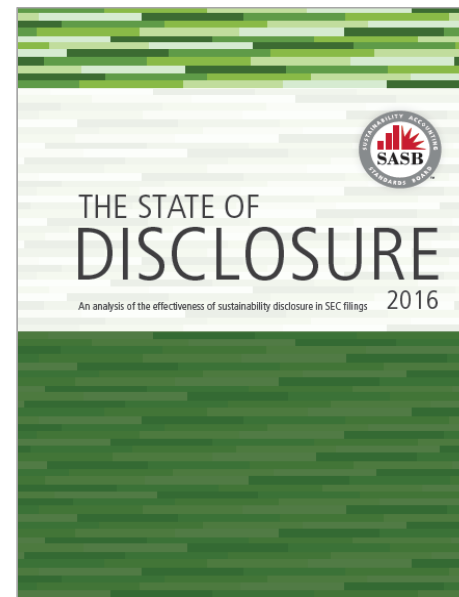
SASB's Engagement Guide, Field Guide and State of Disclosure Reports can guide discussion with companies about ESG issues



Industry-specific guidance on how asset owners and asset managers can use SASB standards to inform their engagement with companies. Provides questions that investors can ask to assess long-term risks at companies for all 79 industries



Distills SASB's standards for 79 industries into one easy-to-use reference manual



Annual reference document for investors and other users of financial information to better understand the current state of disclosure on SASB's topics and metrics



# The SASB Navigator

A comprehensive resource for searching the standards, evidence, and disclosure quality



Navigator  
materiality matters.



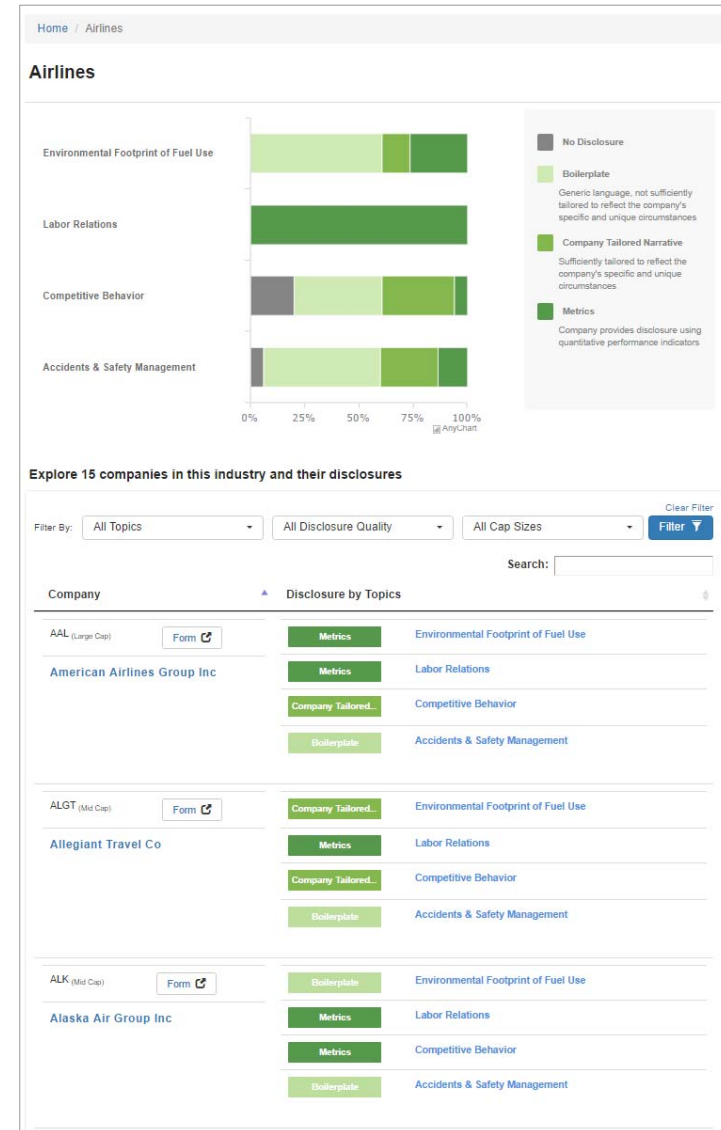
Browse SASB Standards



Review evidence making the case for financial impact



Evaluate SEC disclosures on SASB topics for 4,300+ public filings



Demo available at [navigator.sasb.org](http://navigator.sasb.org)



# The Fundamentals of Sustainability Accounting Credential

FSA Credential increases understanding of the link between sustainability and value

- 500 have signed up for Level I
- 100+ have passed Level I & II
- 20-30 hours of study time per exam
- 80% pass Level I; 65% pass Level II

“This study has fine-tuned my view and understanding of non-financial risk and its factors. **It will improve our investment analysis.**”

CHRISTOPHER AILMAN  
CHIEF INVESTMENT OFFICER • CALSTRS



## Level I Principles

- How sustainability information can be financially material
- The implications for companies and investors

## Level II Practices

- How to gain an enhanced understanding of a company's performance and value from material sustainability information

CE Qualified  
Activity



CFA Institute





# Market Support for SASB



# Making an Impact

SASB standards draw wide interest across the global capital markets

# >100,000

As of Sept 2017

**STANDARDS  
DOWNLOADS**

by

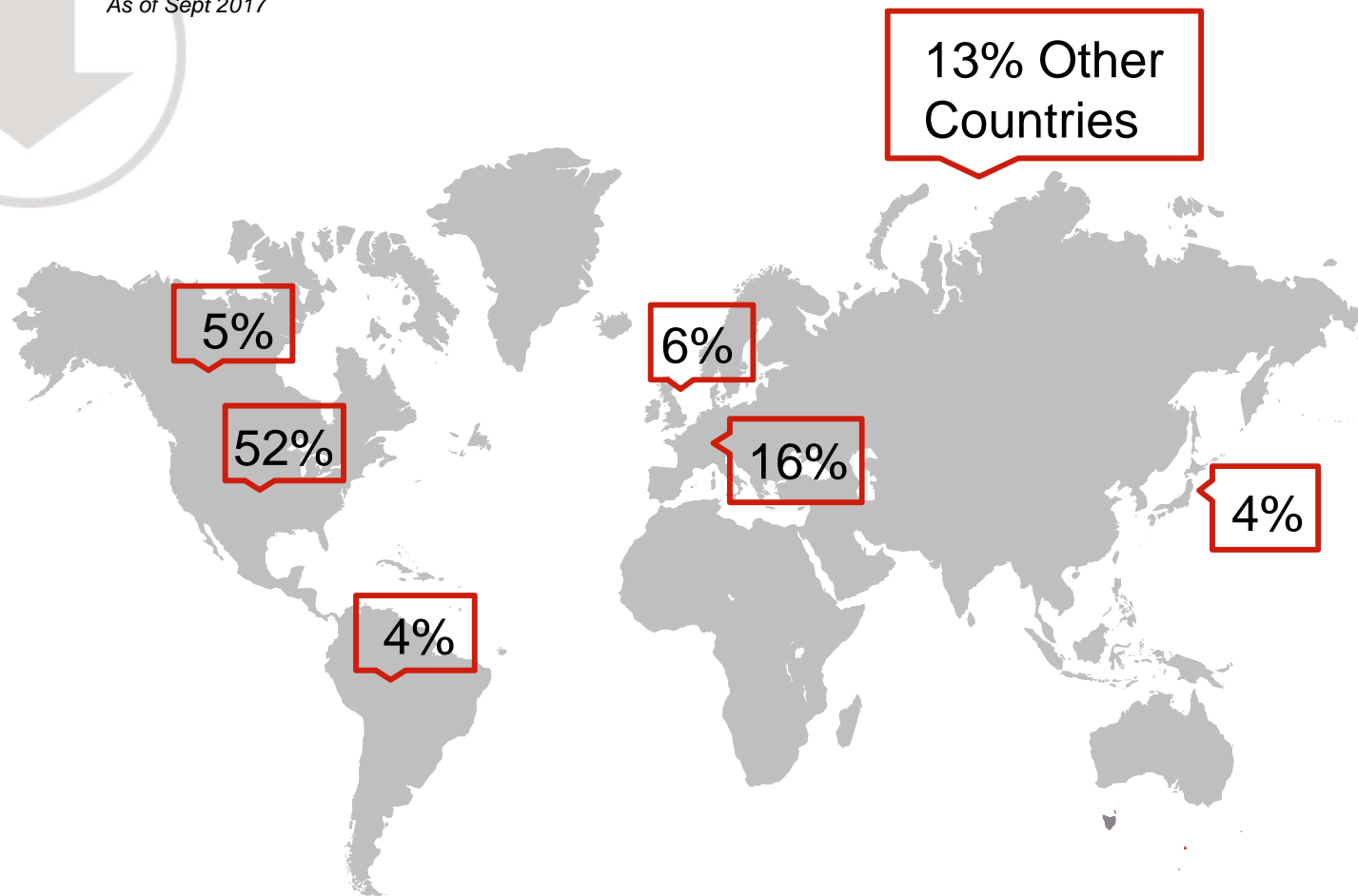
# >12,900

**USERS**

in

# >120

**COUNTRIES**



## Top Equity Markets

1. U.S. (\$26.1T)
2. E.U. (\$7.6T)
3. China (\$6.3T)
4. Japan (\$4.5T)
5. India (\$3.3T)

Equity Market Source: WFE, January 2016



# Institutional Investor Support for Improved ESG Disclosure

SASB's Investor Advisory Group includes investors with over \$21 trillion in assets



# SASB Investor Advisory Group

IAG Members include senior investment decision makers from major asset owners and asset managers

<b>Aberdeen Asset Management</b>	<b>Hugh Young</b> , Managing Director of Aberdeen Asset Management Asia Limited, and Group Head of Investments
<b>APG</b>	<b>Egon Vavrek</b> , Fundamental Equities, Global Emerging Markets
<b>bclMC (British Columbia Investment Management Corporation)</b>	<b>Bryan Thomson</b> , Senior Vice President, Public Equities
<b>BlackRock</b>	<b>Michelle Edkins</b> , Managing Director & Global Head of Investment Stewardship
<b>Breckinridge Capital Advisors</b>	<b>Peter Coffin</b> , Founder & President
<b>CalPERS</b>	<b>Ted Eliopoulos</b> , Chief Investment Officer
<b>CalSTRS</b>	<b>Christopher Ailman</b> , Chief Investment Officer (IAG Chair)
<b>Calvert Research and Management</b>	<b>John Streur</b> , President & CEO
<b>Capital Group International</b>	<b>Robert W. Lovelace</b> , Vice-Chairman
<b>Domini Impact Investments</b>	<b>Carole M. Laible</b> , CEO
<b>Goldman Sachs Asset Management</b>	<b>Hugh Lawson</b> , Managing Director and Global Head of Institutional Client Strategy
<b>Jarislowsky Fraser</b>	<b>Dan Hanson</b> , Partner
<b>New York City Retirement Systems</b>	<b>Scott Evans</b> , Deputy Comptroller for Asset Management and Chief Investment Officer

<b>Nordea Asset Management</b>	<b>Eivind Lorgen</b> , CEO Nordea Investment Management, North America
<b>Northern Trust Asset Management</b>	<b>Christopher Shipley</b> , Senior Vice President and Head of Fundamental Equities
<b>Ontario Teachers' Pension Plan</b>	<b>Barbara Zvan</b> , Senior Vice-President, Strategy & Risk and Chief Investment Risk Officer
<b>Oregon State Treasury, Investment Division</b>	<b>John Skjervem</b> , Chief Investment Officer
<b>PGGM Investments</b>	<b>Felix Lanter</b> , Head of Equities
<b>PIMCO</b>	<b>Christian Stracke</b> , Global Head of Credit Research
<b>QMA</b>	<b>Margaret Stumpp</b> , Senior Advisor
<b>State Street Global Advisors</b>	<b>Lynn Blake</b> , Executive Vice President & Chief Investment Officer, Global Head of Beta Solutions
<b>TIAA Investments</b>	<b>Tom Franks</b> , Chief Investment Officer, Global Equities
<b>UAW Retiree Medical Benefits Trust</b>	<b>Benjamin L. Cotton, CFA</b> , Senior Managing Director, Liquid Markets <b>Thomas Henley</b> , Senior Managing Director, Strategic Opportunities
<b>UBS Asset Management</b>	<b>Bruno Bertocci</b> , Managing Director, Head of Sustainable Investors
<b>Vanguard</b>	<b>Glenn Booraem</b> , Principal and Head of Corporate Governance
<b>Walden Asset Management</b>	<b>Heidi Soumerai</b> , Managing Director, Director of ESG Research
<b>Wells Fargo Asset Management</b>	<b>Kirk Hartman</b> , President and Chief Investment Officer, Wells Capital Management
<b>Wespath Investment Management</b>	<b>David Zellner</b> , Chief Investment Officer



# SASB Investor Advisory Group

## IAG Purpose

The SASB Investor Advisory Group (IAG) comprises leading asset owners and asset managers who recognize the need for consistent, comparable and reliable disclosure of material, decision-useful ESG information.

### IAG members:

- Encourage companies to disclose material and decision-useful ESG information to investors
- Believe standards would improve the quality and comparability of sustainability-related information
- Believe SASB's approach—which is industry-specific and materiality-focused—will help provide investors with relevant and decision-useful information
- Agree to participate in SASB's ongoing standards development process, so that outcomes best reflect investor needs
- Agree to encourage companies to participate in SASB's ongoing standards development process, so that outcomes reflect both issuer and investor viewpoints
- Believe that SASB standards can inform integration of sustainability factors into investment and/or stewardship processes, such as corporate engagement and proxy voting

# SASB Alliance

Membership for individuals and organizations who benefit from a market standard

## MEMBERS JOIN SASB ALLIANCE TO

EXPLORE BEST PRACTICES TO INTEGRATE ESG INFORMATION

SUPPORT A STANDARD TO BENEFIT THE MARKET

### Organizational Membership

- Exclusive convenings
- Engage with SASB leadership
- Educational resources
- More

### Individual Membership

- Latest research
- \$700 in discounts
- Annual member reception



[sasb.org/alliance](https://sasb.org/alliance)

“The SASB Alliance makes it easier for me to tap into the wealth of resources that SASB has created, which strengthens my ability to offer leading and value-creating ESG integration services to companies and investors.”

**MARIE-JOSÉE PRIVYK, CFA, SIPC**  
SASB Alliance Individual Member

## MEMBERS INCLUDE



# Toward a Market Standard

## What institutional investors can do to help

- **Encourage companies** to disclose material and decision-useful ESG information to investors
- **Publicly support the need for a market standard** and SASB's industry-specific and materiality-based approach
- **Encourage companies** to participate in SASB's standards development process
- Participate in the **public comment period** on SASB's standards
- **Use SASB standards/metrics** to inform investment decision making, risk management and investment stewardship processes
- Express the need for a SASB "lens" on information to **data providers**
- Ask investment managers about use of the SASB standards during **manager selection and monitoring**
- Encourage staff to obtain the **FSA Credential**
- **Join the SASB Alliance**





**Accounting for a  
Sustainable Future**



## The Challenges & Benefits of Implementing Sustainable Practices Into and Organization



**David Lear**  
VP, Sustainability  
Dell Inc



**Scott Macmurdo**  
Sustainability Specialist  
NRG



# CSR at Dell





**population**



**resources**

**WHY?**



**customers**



**employees**



# population



**2 billion** more people on earth over the next 30 years



**3 billion** more people in the middle class by 2030



resources



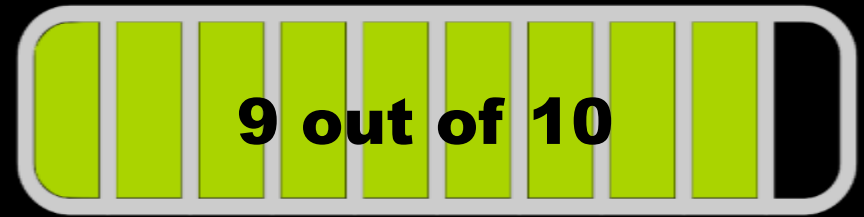


employees

The causes a company supports is the 3rd-most important factor for going to a company, behind core products and culture.



customers



consumers expect companies to do more than make a profit

# Building a Legacy of Good

## 22 Sustainability Goals for 2020

**We are committed to driving human progress by putting our technology and expertise to work where it can do the most good.**

### Supply Chain

Driving transparency, accountability and continuous improvement across a responsible supply chain.

### Environment

From innovative design to end-of-life recycling and everything in between, we keep the environment in mind.

### People

Attracting the best talent, building diverse and inclusive teams, and winning together. That's the Dell way.

### Communities

We apply our funding, technology, and volunteered expertise to help communities grow and thrive.

Learn more at [legacyofgood.dell.com](https://legacyofgood.dell.com)





# Results of closed-loop plastics supply chain efforts



First UL Environment-certified closed-loop process

## 11M lbs.

Of plastic parts created through closed-loop process since 2014

## 91

Products using closed-loop plastics, incl. monitors and OptiPlex desktops

## 11% smaller

Carbon footprint for these parts compared to using virgin plastics

## \$1 million

Saved in costs



# Turning the tide on ocean plastics



## How it works.



### 1. Collect

Plastics are collected from waterways, beaches, shorelines and areas near the coasts.



### 2. Sort

Then, it's aggregated and sorted by various waste processors.



### 3. Process & Clean

Plastics are refined and mixed with recycled HDPE plastics — such as bottles and food storage containers.



### 4. Use

The resulting mixture is then molded into packaging trays for Dell XPS notebooks.



### 5. Reuse

The trays are curbside recyclable — making them a viable resource in the circular economy.

## And we're just getting started.



Dell is on pace to use

**16,000 POUNDS**

of ocean plastics this year.

## Follow our effort:

Dell wants to keep plastics in the economy and out of the world's oceans. See more ways we're helping at [Dell.com/oceanplastics](https://www.dell.com/oceanplastics)

# Reducing our own impact

**40% reduction** in carbon emissions by 2020 – now 16%

24% of electricity sourced from renewable sources – goal of 50% in 2020

99% of waste from manufacturing diverted from landfills



# Technology Access

## 2.3 million kids

Youth around the world have better access to technology and brighter futures with Dell's Youth Learning programs.

Our goal is to help 4 million people directly and 12 million people indirectly by 2020.



# Building a Legacy of Good FY17 highlights

---

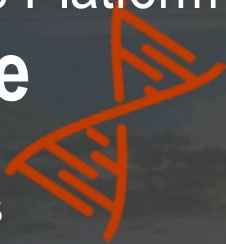
**99%**

Manufacturing waste  
diverted from landfills

Saving customers  
**\$380 mil**  
in electricity costs



Dell Genomic  
Data Analysis Platform  
**2-3x more  
effective**  
in clinical trials



**2.3 million  
youth** with better  
access to technology

**35%** of all plastic parts  
in products made with  
recycled content

Learn more at [legacyofgood.dell.com](http://legacyofgood.dell.com)





Giving Volunteering Communities Donating  
Recycling Giving Donating Environment  
Communities Recycling People Diversity  
Donating Communities Volunteering Giving  
Environment Donating Giving Recycling  
Diversity Volunteering Environment People

# #LegacyOfGood

Diversity People Recycling Communities  
Giving Volunteering Communities Donating



# Corporate Sustainability

## Trends and Opportunities

November 8, 2017  
Sage Advisory's Sustainable Investment Roundup

Scott Macmurdo  
Sustainability Specialist  
NRG Energy, Inc.

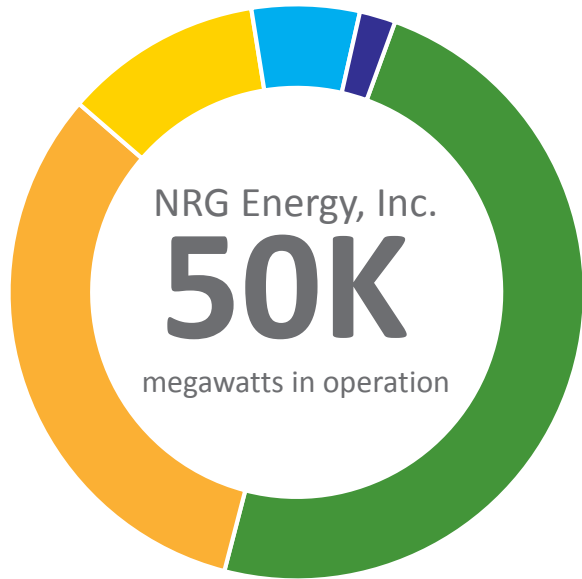
# Agenda

1 Sustainability at NRG

2 Business Case for Sustainability

3 Sustainability Trends



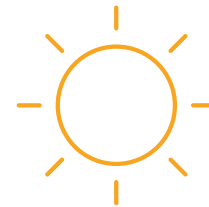


Global, diverse energy



**3,000,000**

recurring customers within NRG retail brands



One of the nation's largest

**SOLAR**

Power generators

Ownership interest in nearly **140**  
power-generation facilities across 24 states



Largest independent  
power producer in U.S.

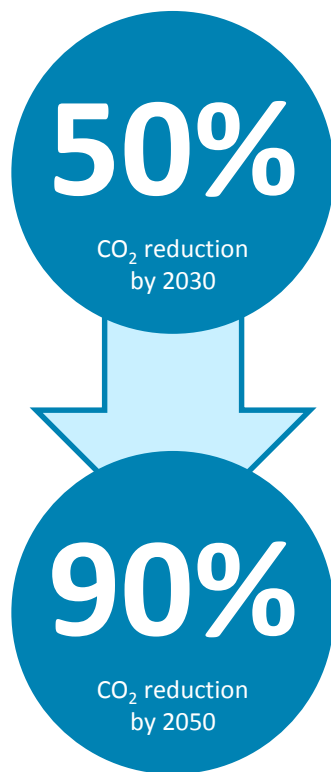


**Fortune 500**

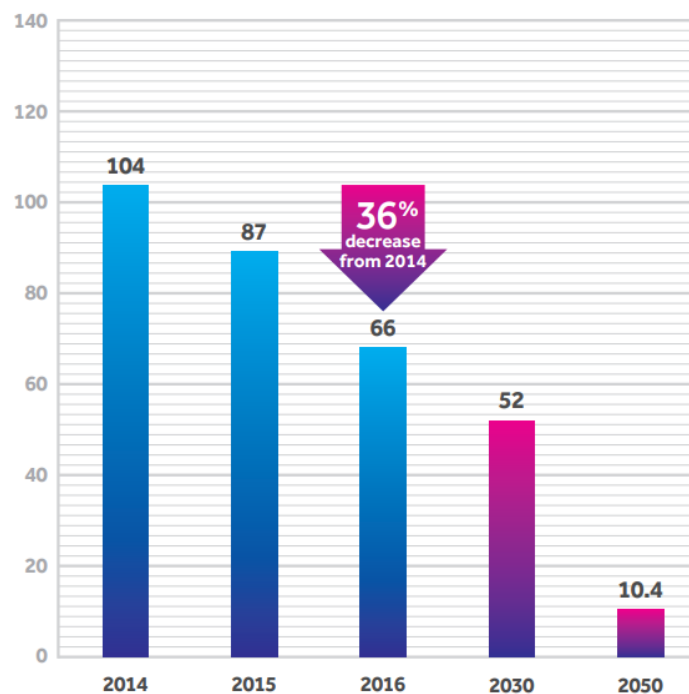


✦ Sustainability means **thriving** into the future.

# Our carbon goal



Tracking toward our carbon emission goals  
(NRG U.S. CO<sub>2</sub>e emissions scope 1, 2, & 3\*)



*This chart represents our progress toward achieving our carbon emission reduction goals. Included in these values are scope 1, 2 and 3.*

*\*Other CO<sub>2</sub>e charts include only scope 1 emissions from generation.*

NRG is the only major U.S. power producer with a science-based carbon goal

# Agenda

1

Sustainability at NRG

2

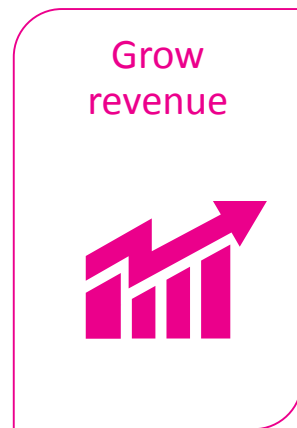
Business Case for Sustainability

3

Sustainability Trends

# Business case for sustainability

Sustainability provides four main business benefits:



# Business case for sustainability



## Cut costs



Enhancing efficiency is often the cheapest route to reducing impact

# Business case for sustainability



**Grow revenue**



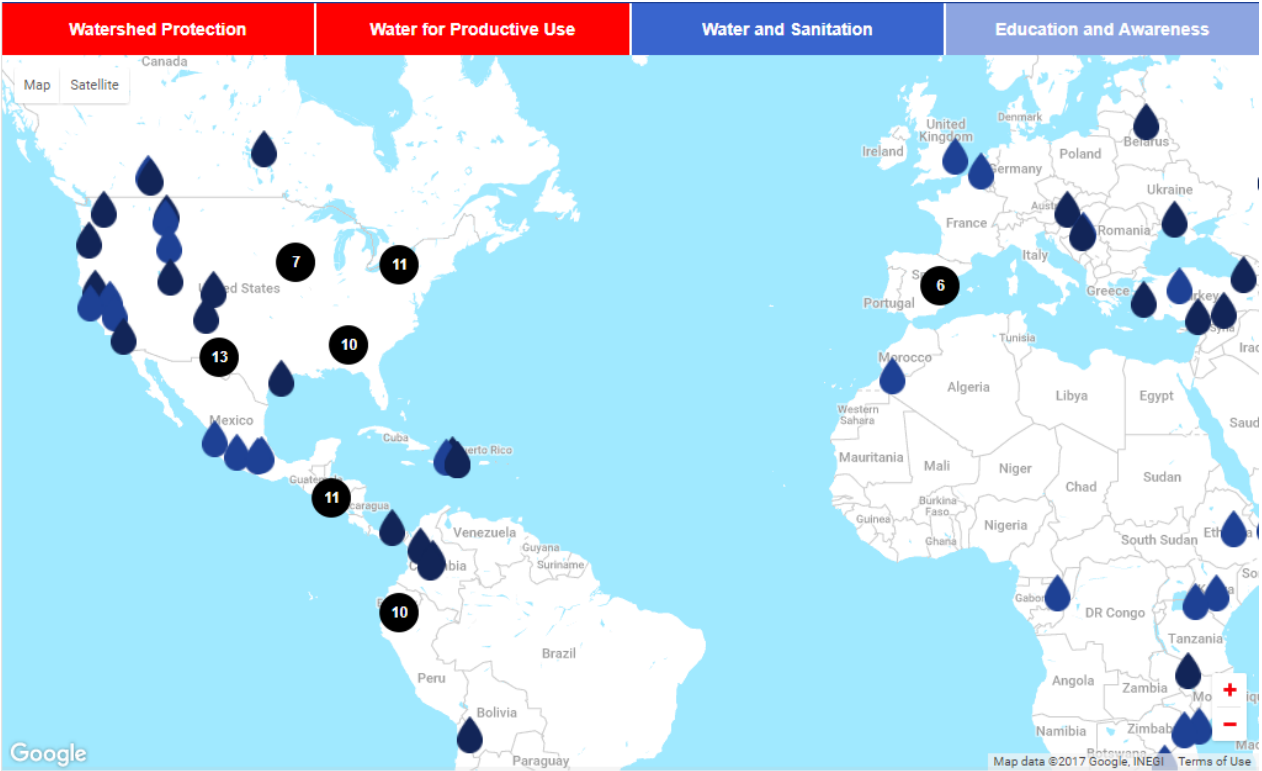
**Companies are succeeding by providing sustainable goods and services that customers want**



# Business case for sustainability



## Reduce risk



Coca-Cola Water Map, accessed 2 November 2017

Coca-Cola's global water stewardship projects ensure license to operate

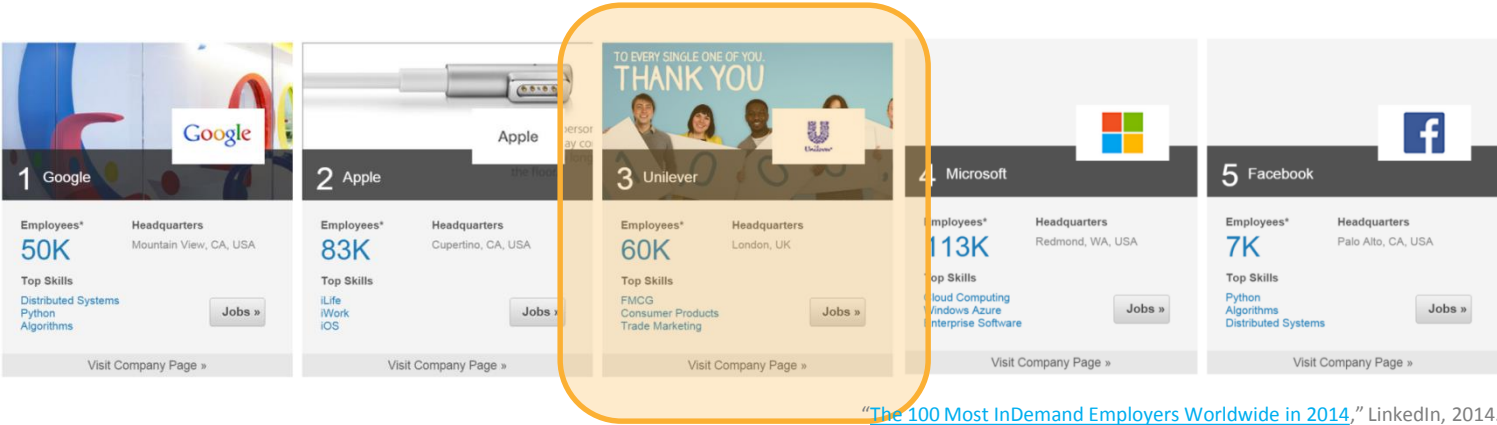


# Business case for sustainability



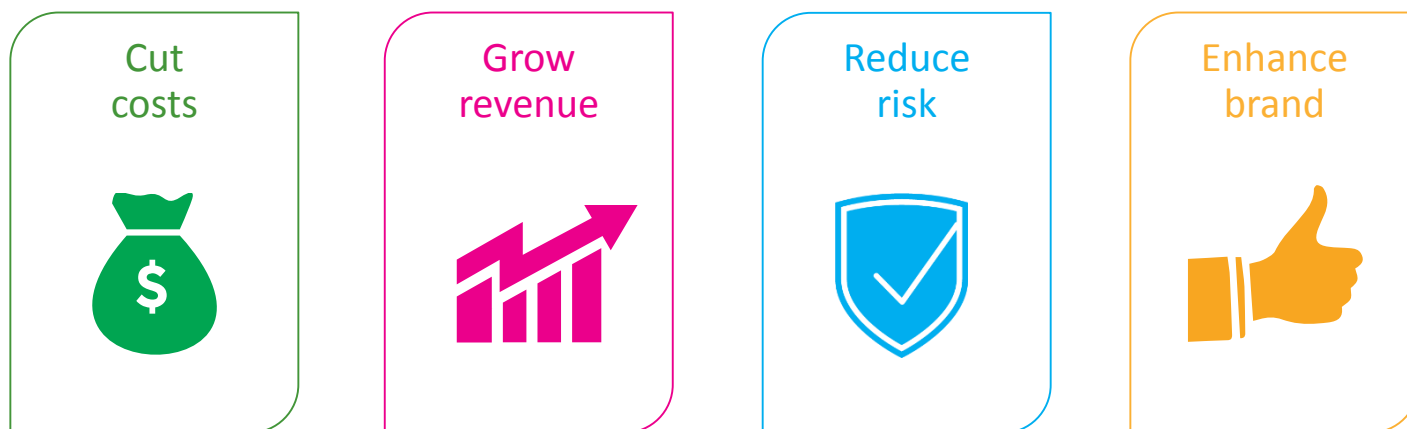
## Enhance brand

LinkedIn's list of the world's most in-demand employers:



Which of these is not like the others?

# Business case for sustainability



- Successful companies leverage their sustainability strategies to capture these four business benefits
- Sustainability is more than just altruism, and that's OK

# Agenda

1

Sustainability at NRG

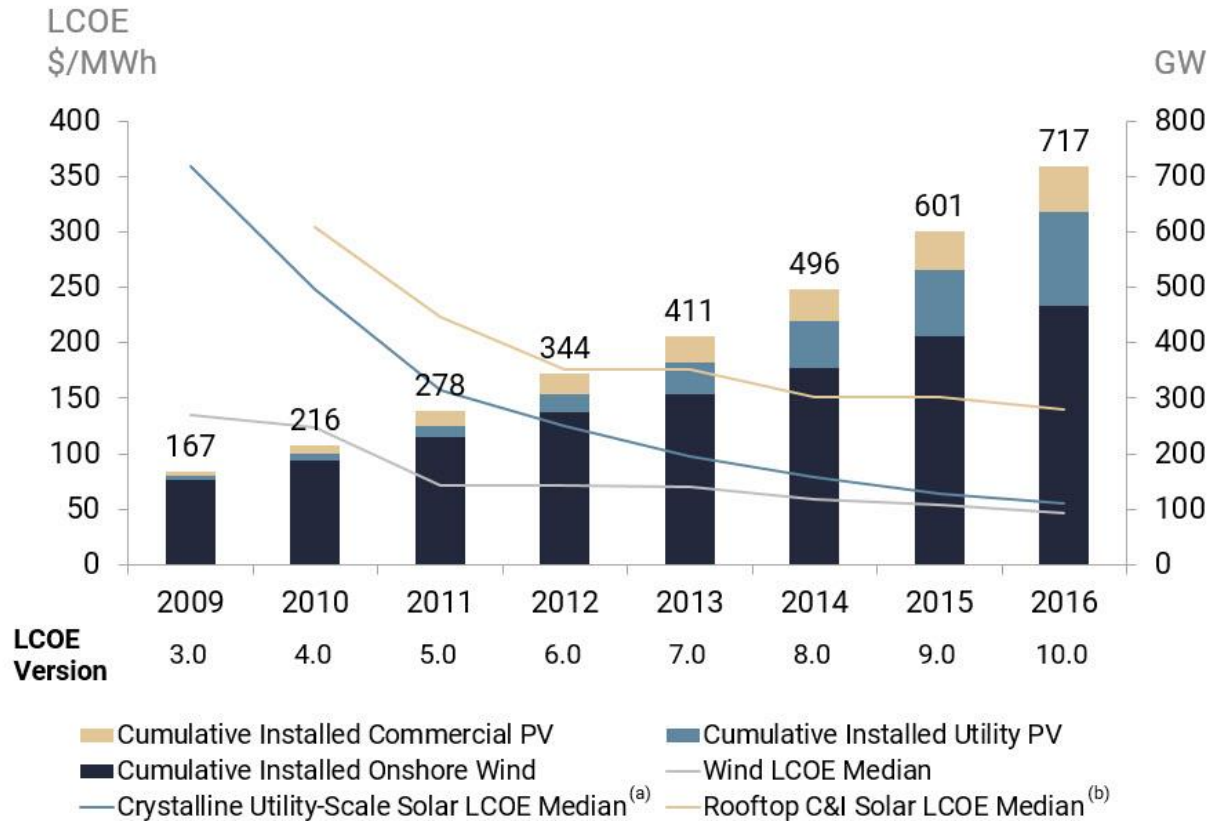
2

Business Case for Sustainability

3

Sustainability Trends

# Markets shift to renewables



<sup>(a)</sup> "Levelized Cost of Energy Analysis 10.0," Lazard, 2016.

Renewable energy prices are rapidly declining due to technological advancement, spurring growth in the sector

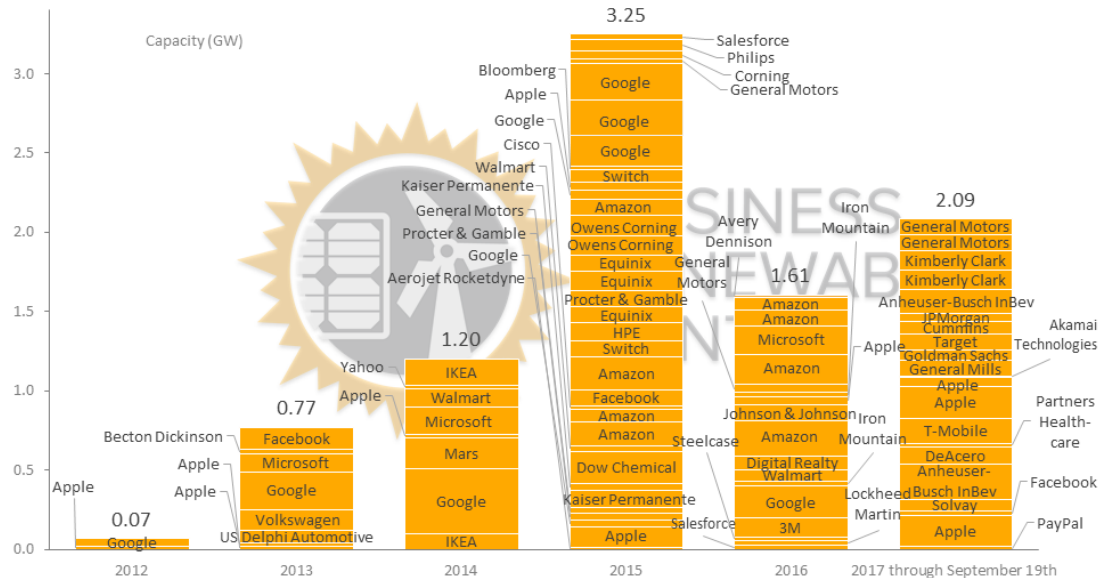
# Private sector leads on sustainability

- Half of all *Fortune* 500 companies have a sustainability or renewable energy commitment<sup>1</sup>.
- Hundreds of companies said “We’re Still In” following the U.S. withdrawal from the Paris Climate Accords<sup>2</sup>.
- Over 100 companies have pledged to purchase 100% renewable energy through RE100<sup>3</sup>.



## Corporate Renewable Deals

2012 – 2017



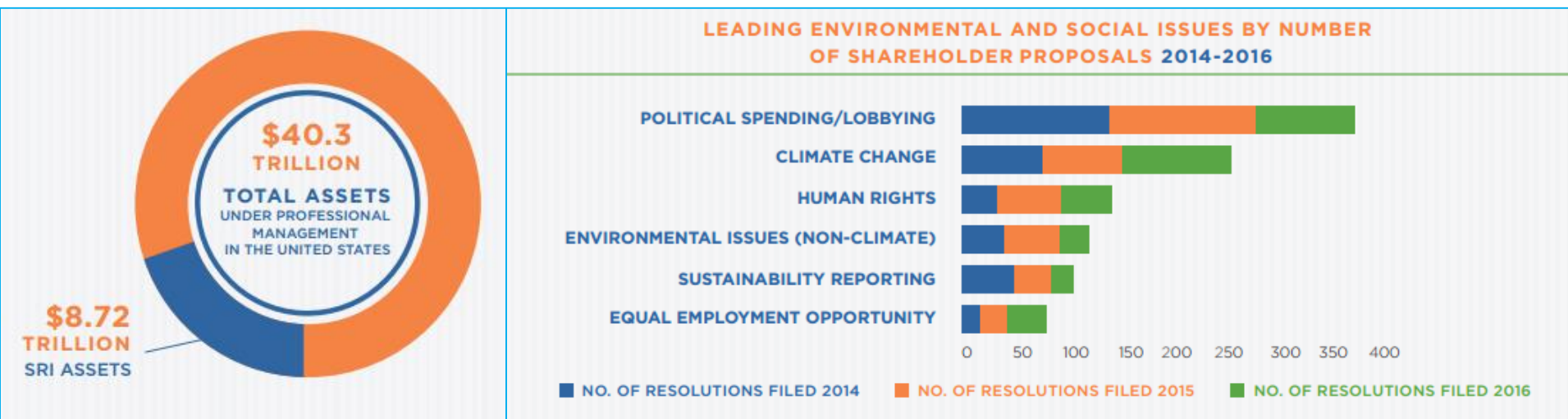
[BRC Deal Tracker](#), Rocky Mountain Institute, accessed 2 November 2017.

<sup>1</sup> “Power Forward 3.0: How the Largest U.S. Companies are Capturing Business Value while Addressing Climate Change,” World Wildlife Fund, Ceres, Calvert, and CDP, 2017

<sup>2</sup> [We Are Still In](#), accessed 2 November 2017.

<sup>3</sup> [RE100 Companies](#), accessed 2 November 2017.

# Investors pursue sustainability



"Sustainable and Impact Investing in the United States," U.S. SIF, 2016

- Sustainable investing has grown 33% since 2014 and now accounts for 20% of assets under professional management<sup>1</sup>.
- 80% of studies show a positive correlation between sustainability and stock performance<sup>2</sup>.
- Shareholder activism has encouraged major corporate sustainability commitments.

<sup>1</sup>Report on U.S. Sustainable, Responsible, and Impact Investing Trends 2016, "U.S. SIF, 2016.

<sup>2</sup>From the Stockholder to the Stakeholder: How Sustainability can Drive Financial Performance," Oxford University and Arabesque Partners, 2015.





**Scott Macmurdo**  
Sustainability Specialist  
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[scott.macmurdo@nrg.com](mailto:scott.macmurdo@nrg.com)  
(225) 223-7475

# Safe Harbor Statement

*The opinions expressed in this presentation are solely my own, and do not necessarily express the views or opinions of my employer, NRG Energy, Inc.*

## **Forward-Looking Statements**

In addition to historical information, the information presented in this communication includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Exchange Act. These statements involve estimates, expectations, projections, goals, assumptions, known and unknown risks and uncertainties and can typically be identified by terminology such as “may,” “should,” “could,” “objective,” “projection,” “forecast,” “goal,” “guidance,” “outlook,” “expect,” “intend,” “seek,” “plan,” “think,” “anticipate,” “estimate,” “predict,” “target,” “potential” or “continue” or the negative of these terms or other comparable terminology. Such forward-looking statements include, but are not limited to, statements about the anticipated benefits of acquisitions, the Company’s future revenues, income, indebtedness, capital structure, plans, expectations, objectives, projected financial performance and/or business results and other future events, and views of economic and market conditions.

Although NRG believes that its expectations are reasonable, it can give no assurance that these expectations will prove to be correct, and actual results may vary materially. Factors that could cause actual results to differ materially from those contemplated herein include, among others, general economic conditions, hazards customary in the power industry, weather conditions, including wind and solar performance, competition in wholesale power markets, the volatility of energy and fuel prices, failure of customers to perform under contracts, changes in the wholesale power markets, changes in government regulations, the condition of capital markets generally, our ability to access capital markets, unanticipated outages at our generation facilities, adverse results in current and future litigation, failure to identify, execute or successfully implement acquisitions, repowerings or asset sales, our ability to implement value enhancing improvements to plant operations and companywide processes, our ability to implement and execute on our publicly announced transformation plan, including any cost savings, margin enhancement, asset sale, and net debt targets, our ability to proceed with projects under development or the inability to complete the construction of such projects on schedule or within budget, risks related to project siting, financing, construction, permitting, government approvals and the negotiation of project development agreements, our ability to progress development pipeline projects, the timing or completion of the GenOn restructuring, the inability to maintain or create successful partnering relationships, our ability to operate our businesses efficiently, our ability to retain retail customers, our ability to realize value through our commercial operations strategy and the creation of NRG Yield, the ability to successfully integrate businesses of acquired companies, our ability to realize anticipated benefits of transactions (including expected cost savings and other synergies) or the risk that anticipated benefits may take longer to realize than expected, our ability to close the Drop Down transactions with NRG Yield, and our ability to execute our Capital Allocation Plan. Debt and share repurchases may be made from time to time subject to market conditions and other factors, including as permitted by United States securities laws. Furthermore, any common stock dividend is subject to available capital and market conditions.

NRG undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. Any estimates are based on assumptions the company believed to be reasonable as of that date. NRG disclaims any current intention to update such estimates, except as required by law. The foregoing review of factors that could cause NRG’s actual results to differ materially from those contemplated in the forward-looking statements included in this presentation should be considered in connection with information regarding risks and uncertainties that may affect NRG’s future results included in NRG’s filings with the Securities and Exchange Commission at [www.sec.gov](http://www.sec.gov).



## The Investing Enlightenment

**Mirtha D. Kastrapeli**  
Global Head, Center for Applied Research  
State Street





# The Investing Enlightenment:

How Principle and Pragmatism  
Can Create Sustainable Value  
through ESG



**STATE STREET.**

# The Effective Adoption of ESG Integration In Five Steps

Take Ownership



Walk the talk

Ask



To get the data and solutions you need

Make ESG part of the investment lexicon



Get Educated

Incorporate  
Materiality Filter



Investment decisions should be based on the material ESG issues

Performance metrics and incentives structure need to reflect the long-term nature of ESG investing



Align Time Horizons



Investing Enlightenment

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CORP-2793

Expiration Date: 3/31/2018

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## Practical Tools to Integrate ESG into the Investment Process



**Shila Wattamwar**  
Director of Advisory Services  
Sustainalytics



**Greg Elders**  
ESG Analyst  
Bloomberg

# ESG on Bloomberg

**Gregory Elders**  
Bloomberg Intelligence  
Environmental, Social and Governance  
Senior Analyst  
[gelders2@bloomberg.net](mailto:gelders2@bloomberg.net)

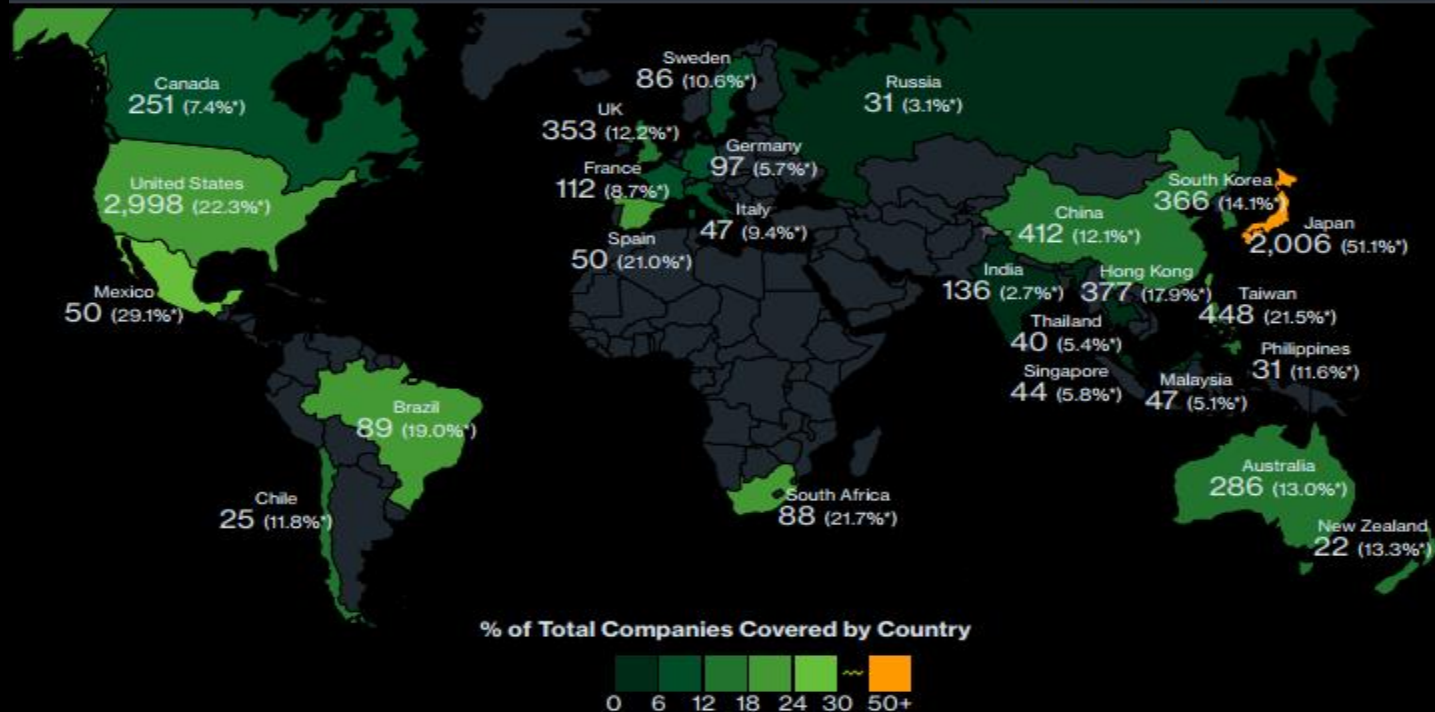
November 2017



# GLOBAL ESG DATA COVERAGE

## ESG Geographic Coverage

...with **18.3%** global coverage based on **9,327** companies primarily listed on major exchanges



\*of total number of listed companies in country.

Data as of 7/14/2017



# INTEGRATION ACROSS TERMINAL

SPDR S&P500 ETF TR vs BE500 by BICS Sectors in USD As of 11/06/17

Date  Trend

Name	Wgt		Div Yld		Latest FY Greenhouse Gas Intensity per		Latest FY % Women on Board			Sustainalytics Rank 1 Day ago		
	Port	Bmrk	Port	Bmrk	Port	Bmrk	Port	Bmrk	+/-	Port	Bmrk	+/-
SPDR S&P500 ETF TRUST ...	100.00	100.00	1.92	3.15	205.053	213.376	22.918	30.018	-7.100	60.223	80.562	-20.338
+ Basic Materials	2.44	6.33	2.11	2.32	1,173.28	764.980	21.270	27.041	-5.771	50.739	73.345	-22.607
+ Cash	0.16								0.000			0.000
+ Communications	13.30	6.96	1.31	3.69	29.720	32.480	24.955	30.210	-5.255	61.199	82.508	-21.309
+ Consumer, Cyclical	8.43	11.32	2.15	2.46	218.383	110.852	23.675	29.737	-6.062	59.454	80.955	-21.501
+ Consumer, Non-cyclical	21.81	26.13	1.95	2.81	42.150	55.290	22.839	28.761	-5.922	64.217	81.668	-17.451
+ Diversified	0.04	0.19	1.12	1.71		33.325	9.091	42.077	-32.98	11.111	46.959	-35.848
+ Energy	5.93	6.18	3.36	5.23	613.876	396.416	22.980	32.027	-9.047	51.290	88.844	-37.555
+ Financial	18.90	22.43	1.80	3.77	24.371	7.718	23.526	32.607	-9.081	52.715	78.379	-25.664
+ Industrial	10.04	11.62	2.04	2.31	141.292	320.657	19.151	27.876	-8.725	51.390	77.724	-26.334
+ Technology	15.81	3.82	1.52	1.20	21.734	59.362	22.558	29.111	-6.553	75.596	91.677	-16.082
+ Utilities	3.14	5.01	3.29	5.02	3,079.23	997.299	23.466	31.917	-8.451	48.696	79.034	-30.338





# BI ESG <GO>

- Analysis**  
 Key short and long term themes, evaluation of key indicators, data-driven research
- Industry & Topic Primers**  
 Industry specific ESG primers, corporate governance models and key sustainable investing topics
- Data Library**  
 Dedicated company and country ESG data, plus 3rd party ESG scores
- Monitor**  
 Monitoring tools for news and data on ESG issues and controversies

Bloomberg Intelligence
91) Actions ▾ 92) Directory 93) Settings

Environmental, Social & Governance Dashboard (BI BESGG)

Research

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[Company](#)

[ESG Scores](#)

[Theme Scores](#)

[Voting \(Japan\)](#)

[Activists](#)

[New Energy](#)

Monitor

[News/Research](#)

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[Markets](#)

Global ☆

Midyear Outlook (Click to see more) »

BI Government Midyear Outlook: ESG

The U.S. government taking a back seat on environmental, social and governance (ESG) issues gives emphasis to reforms taking place around the world. Lack of U.S. climate leadership dents global ...



Page 1 of 21

Critical Themes

- Asset Growth Speeds ESG Shake Up
- Empowering Women in the Boardroom and Executive Suite
- Japan's ESG Awakening
- Sustainable Investing Topic Primer

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Key Indicators Latest

ESG Indicators

31) World CO2 (mil.)	33.43k
32) China	9.12k
33) United States	5.35k
34) European Union	3.49k

Operating Stats (Median)

35) S&P 100 CEO Pay	11.08M
36) Carbon/Sales	2.46
37) Energy/Sales	9.74
38) Water/Sales	16.78
39) % Women on Board	25.00
40) % Ind. Director	75.00
41) Sustainalytics ESG	61.54

Equity Valuation (Median)

42) DJSI World 80 TR	55.95
----------------------	-------

# ESG on Bloomberg

BLOOMBERG INTELLIGENCE

## Assessing Duke Energy and CMS Energy





# BI ESG INDUSTRY PRIMERS

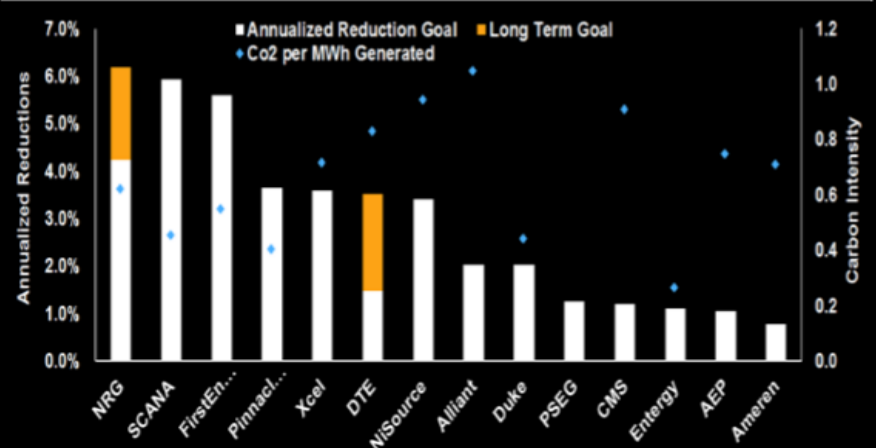
## U.S. Electric Utilities ESG Peer Comparison

	Carbon Intensity	% Coal Generation	% Non Fossil Fuel Generation	Fresh Water Intensity	Safety (TRIR)
◆ AES	0.70	59.7	13.3	27.09	na
▼ Alliant Energy	1.05	64.3	9.4	60.43	2.87
▼ Ameren	0.71	71.1	28.2	107.16	na
◆ American Electric Power	0.73	66.0	12.7	53.56	0.76
◆ Avista	0.33	20.1	54.8	na	3.35
▼ Black Hills	na	83.9	3.1	na	1.70
▼ Calpine	0.40	0.0	5.1	na	0.55
▼ CMS Energy	0.91	43.0	5.9	na	0.99
◆ Dominion Resources	0.36	23.0	48.0	109.65	0.74
◆ DTE Energy	0.82	60.8	24.4	106.48	0.45
▲ Duke Energy	0.44	33.8	38.0	92.20	0.40
▼ Dynegy	0.70	48.2	0.0	na	1.47
▲ Edison International	0.20	0.0	63.7	na	2.34
▲ Energy	0.26	6.9	52.3	na	0.67
▲ Exelon	0.05	0.1	89.2	141.76	0.65
◆ FirstEnergy	0.55	61.8	39.0	na	0.83
◆ IDACORP	0.39	33.2	52.6	na	2.30
▲ NextEra Energy	0.25	2.7	42.8	8.04	0.73
▼ NiSource	0.94	69.7	2.5	29.28	1.55
◆ NRG Energy	0.62	46.5	19.5	64.80	0.62
▲ PG&E	0.18	0.0	83.1	0.04	2.55
◆ Pinnacle West Capital	0.40	26.9	39.8	na	0.51
▼ PPL	0.82	80.6	1.2	15.44	1.30
◆ SCANA	0.45	40.8	25.1	72.81	na
▲ Sempra Energy	0.62	0.0	24.0	0.87	2.35
◆ Southern Co	0.53	33.0	21.0	27.79	0.81
◆ WEC Energy	0.85	70.4	5.1	95.77	0.49
◆ Xcel Energy	0.71	56.8	20.6	32.88	1.00

Note: Data time periods may differ based on available disclosure  
 Source: Company filings, Bloomberg Intelligence

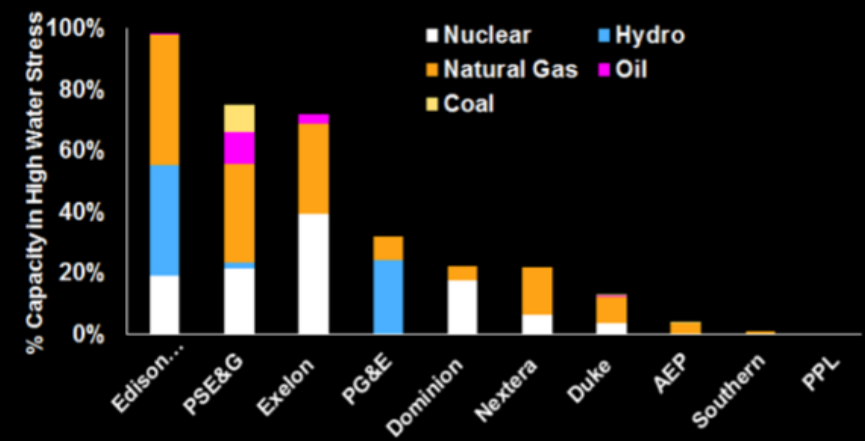
# ADDITIONAL DATA AND INSIGHT

Annualized Carbon Reduction Goals



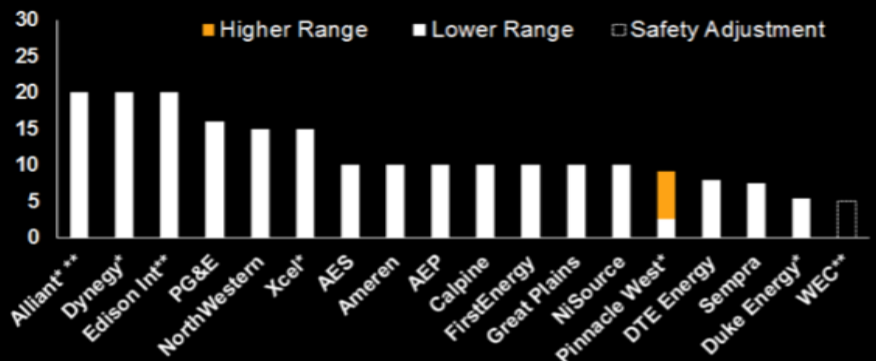
Source: Company filings, Bloomberg Intelligence

% Conventional Capacity in High Water Stress



Source: Company filings, Bloomberg Intelligence

Utilities Executive Sustainability Bonus (%)



\*Safety & Environment; \*\*Safety & People  
Source: Company filings, Bloomberg Intelligence

Bloomberg		Bloomberg Intelligence Governance Scoring										
Help		SPX Index					S&P 500 INDEX					
Refresh		Enrichment					Utilities					
Raw Data		Enrichment					Utilities					
	Enrichment	Outlier Score	Industry	Country	Overall Average	Enrichment	Overboarding	Diversity	Shareholder	Audit Policy	Independence	Remuneration
	Outlier Score	Outlier Score	Country	Overall Average	Outlier Score	Outlier Score	Outlier Score	Outlier Score	Outlier Score	Outlier Score	Outlier Score	Outlier Score
AMEREN CORPORATION	8.00	Utilities	UNITED STATES	6.32	8.00	4.40	15.50	4.40	6.00	3.25	4.67	6.67
AMERICAN ELECTRIC POWER	5.50	Utilities	UNITED STATES	6.98	5.50	4.20	7.83	1.60	15.50	5.57	8.67	6.67
DTE ENERGY COMPANY	10.50	Utilities	UNITED STATES	7.06	10.50	1.00	13.67	8.00	1.00	8.57	6.67	6.67
SEMpra ENERGY	7.25	Utilities	UNITED STATES	7.43	7.25	10.20	9.00	6.00	4.75	7.14	7.67	6.67
NEXTERA ENERGY INC	6.20	Utilities	UNITED STATES	7.56	6.20	15.40	12.33	4.40	4.50	5.57	4.33	6.67
XCEL ENERGY INC	5.00	Utilities	UNITED STATES	7.60	5.00	5.40	12.00	4.60	11.20	7.14	7.67	6.67
DUKES ENERGY CORP	9.33	Utilities	UNITED STATES	7.70	9.33	1.00	13.17	1.80	12.00	9.57	9.00	6.67
ALLIANT ENERGY CORP	1.67	Utilities	UNITED STATES	7.86	1.67	5.00	15.37	15.20	3.75	6.43	9.83	6.67
PG&E CORP	12.80	Utilities	UNITED STATES	7.97	12.80	1.00	13.33	4.60	6.20	10.86	5.00	6.67
ENTERGY CORP	9.60	Utilities	UNITED STATES	8.03	9.60	9.00	9.33	10.40	6.60	3.29	8.00	6.67
DOMINION ENERGY INC	15.00	Utilities	UNITED STATES	8.54	15.00	15.20	10.17	5.25	3.00	4.14	7.00	6.67
WESTERN ENERGY CORP	9.17	Utilities	UNITED STATES	8.61	9.17	3.00	15.37	11.20	1.00	10.00	11.00	6.67
AMERICAN WATER WORKS CO INC	9.60	Utilities	UNITED STATES	8.71	9.60	14.80	6.33	5.40	8.00	14.00	2.83	6.67
EDISON INTERNATIONAL	15.80	Utilities	UNITED STATES	8.85	15.80	3.00	19.17	6.80	6.60	4.43	6.17	6.67
NISOURCE INC	9.00	Utilities	UNITED STATES	8.97	9.00	5.40	25.00	8.40	8.40	5.86	4.33	6.67
AES CORP	10.40	Utilities	UNITED STATES	9.10	10.40	7.60	12.00	13.75	1.00	7.14	11.83	6.67
PPL CORP	5.83	Utilities	UNITED STATES	9.18	5.83	5.20	15.50	2.25	11.75	11.71	8.00	6.67
NRG ENERGY INC	14.00	Utilities	UNITED STATES	9.20	14.00	1.00	14.50	7.60	6.40	7.71	13.17	6.67
CAHO ENERGY CORP	21.00	Utilities	UNITED STATES	9.50	21.00	5.00	12.33	10.00	6.00	8.86	6.33	6.67
PUBLIC SERVICE ENTERPRISE CO	12.20	Utilities	UNITED STATES	9.59	12.20	10.80	14.67	4.60	6.00	6.43	7.50	6.67
EXELON CORP	3.00	Utilities	UNITED STATES	9.98	3.00	12.80	11.00	5.00	18.25	10.00	9.83	6.67
CENTERPOINT ENERGY INC	8.40	Utilities	UNITED STATES	10.91	8.40	8.00	14.40	20.75	11.00	87.50	6.83	6.67
EVERSOURCE ENERGY	15.25	Utilities	UNITED STATES	10.99	15.25	11.00	21.00	9.00	7.20	10.67	10.83	6.67
SCANA CORP	10.40	Utilities	UNITED STATES	11.11	10.40	5.40	15.33	16.75	7.75	6.43	15.50	6.67
PRINCIPAL WEST CAPITAL	10.00	Utilities	UNITED STATES	11.28	10.00	9.00	20.33	9.20	10.50	3.20	16.67	6.67
WEC ENERGY GROUP INC	24.20	Utilities	UNITED STATES	14.19	24.20	15.00	19.37	6.80	9.00	15.00	10.37	6.67





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# Sustainalytics SAGE Presentation

**Shila Wattamwar**  
**Associate Director, Advisory Services**  
**11/08/17**



# Sustainalytics: Who We Are



20+ years history of conducting ESG research

320+ staff, 170+ analysts



13 office locations, supporting 400+ clients worldwide








Sustainalytics helps clients turn vast quantities of ESG and corporate governance information into insightful, value-added analysis to enable more informed investment decisions.

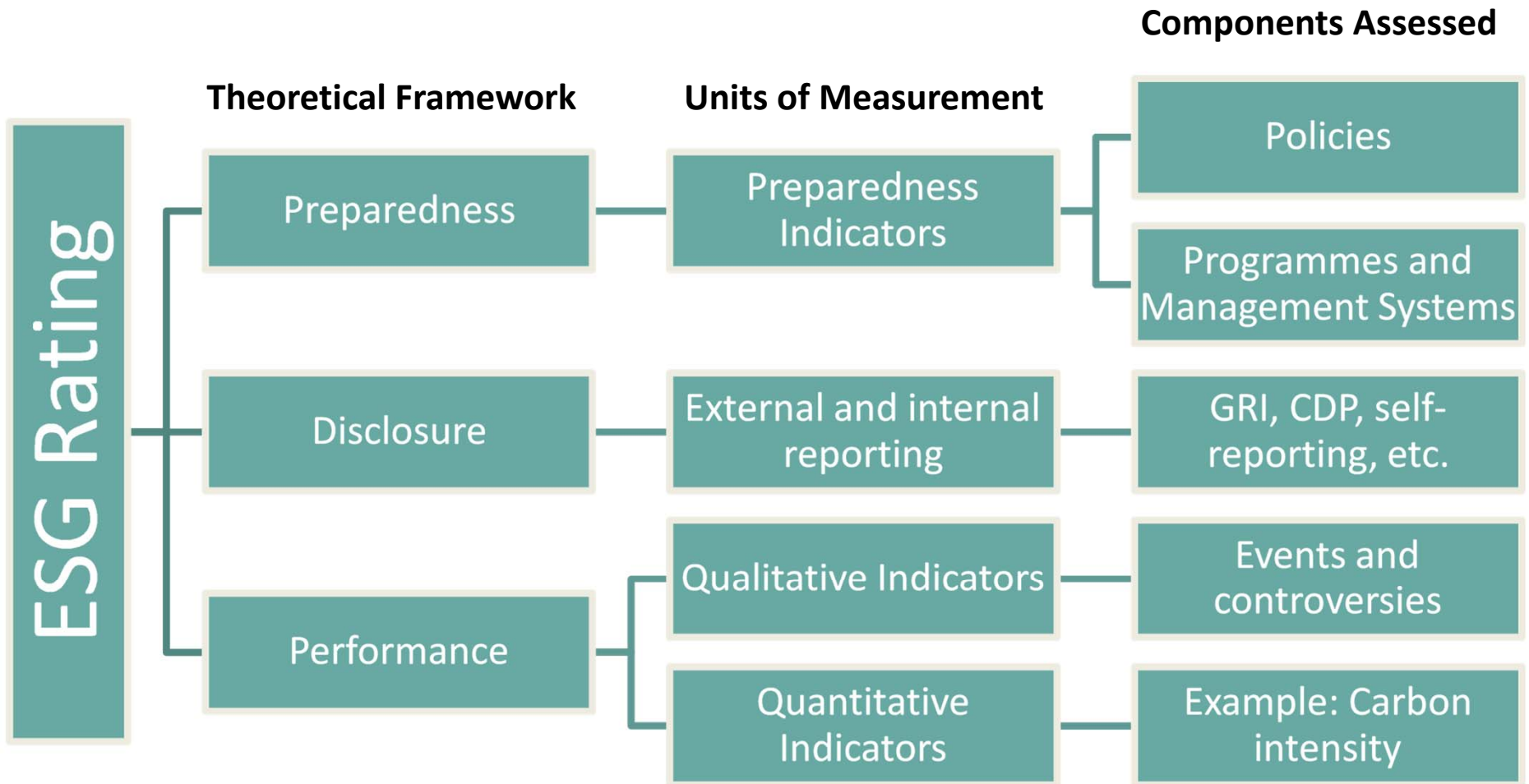
# The Opportunity

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# What is ESG?

ESG Category	ESG Issue	Potential impact on company
Environment 	<ul style="list-style-type: none"> <li>• Resource management and pollution prevention</li> <li>• Reduced emissions and climate impact</li> </ul>	<ul style="list-style-type: none"> <li>• Avoid or minimize environmental liabilities</li> <li>• Lower costs/increase profitability through energy efficiency</li> <li>• Reduce regulatory, litigation and reputational risk</li> </ul>
Social 	<ul style="list-style-type: none"> <li>• Community relations</li> <li>• Indigenous peoples' rights</li> <li>• Human rights</li> </ul>	<ul style="list-style-type: none"> <li>• Improve brand loyalty</li> <li>• Protect and enhance social license to operate</li> <li>• Reduce reputational risk</li> </ul>
Governance 	<ul style="list-style-type: none"> <li>• Executive compensation</li> <li>• Board accountability</li> <li>• Shareholder rights</li> <li>• Avoidance of bribery and corruption</li> </ul>	<ul style="list-style-type: none"> <li>• Align interests of shareowners and management</li> <li>• Avoid negative financial surprises or “blow-ups”</li> <li>• Reduce reputational risk</li> </ul>

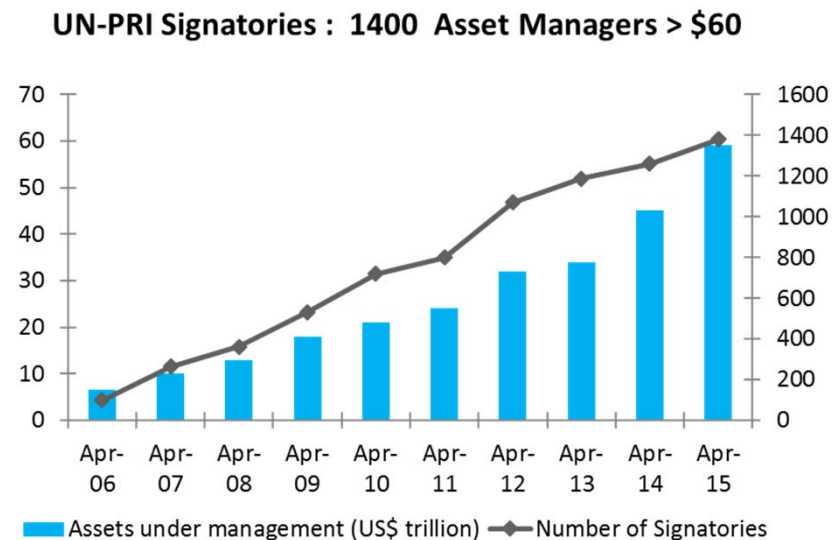
# Sustainalytics ESG Rating Framework



# Environmental, Social & Governance (ESG) is increasingly mainstream



- The market for ESG Investing is approaching \$60 Trillion in AUM.
- Environmental, Social and Governance (ESG) insights are increasingly a core focus of the investment community. This is demonstrated by the strong growth of the United Nations backed Principles of Responsible Investment.
- Now that commitments have been made, investors are looking to “walk the talk”.
- The growth of ESG is not yet reflected in passive investments.



# Strong Client Interest in ESG



- An external survey by U.S. Trust found **40%** of wealthy individuals, who generally had **\$3 million or more** in investible assets, were interested in socially responsible investing.
- Twice as many Merrill Lynch advisors (17%) use **five or more** impact investment products in client portfolios than they did three years ago, according to a Merrill Lynch spokesperson.
- *“There’s no question that **millennials are particularly interested** in this,” said Arline Segal, a vice president and advisor at RBC Wealth Management. “I have plenty of clients that are older, but I’d say the younger ones, many feel extremely strongly about things like climate change.”*

**Source:** Enthusiasm for SRI is Driving Changes in Wealth Management Units

## **In 2017 year alone the following announcements were made:**

- Japan's GPIF committed to put JPY1 trillion (\$9 billion) into ESG solutions
- Swiss Re announced that “it was ditching traditional indexes based on the market capitalization for its fixed income and equities investments, in favor of a suite of ESG alternatives”
- New Zealand's Super Fund put \$10B of equities in to a bespoke low-carbon strategy
- HSBC's UK pension scheme put \$5B into a “climate aware” smart beta index
- CalSTRS put \$2.5B into a low-carbon strategy
- In 2016 & 2017 22 new ETF launched bringing the total number of ETPs with an SRI mandate to 50



# Applying ESG

## Various Approaches to Product Strategy



### ESG-Focused

- Includes investible products that appeal to Investors looking for a primary ESG fund.
- Products are **ESG-focused**, where ESG is the primary input into the methodology.
- Product is still often **optimized** to capture similar exposures to the broader benchmark.
- Allows for **diversification** and does not sacrifice performance.

### Thematic

- Includes investible options that capture companies involved in creating a specific thematic ESG issue.
- Offers **simple exposures** to key areas of sustainable investing.
- Examples include,
  - Gender Diversity
  - Climate Change
  - Environment
  - Water
  - Renewable Energy

### ESG-Aware

- Includes investible products that appeal to those still wanting to invest in their **core strategies**, but are looking to also integrate company ESG issues to obtain better risk adjusted portfolios.
- Products here are **ESG-Aware**, where ESG is an input alongside other integral inputs into the methodology.
- Allows for the capture of ESG characteristics in a **cost-effective** manner/
- Opportunity to bring ESG strategies to core assets.

# Why Now?

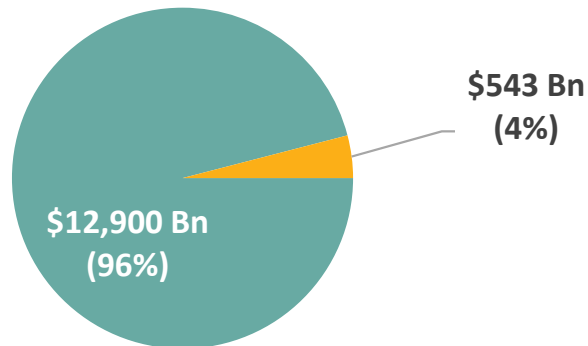
## The Opportunity

### Supply must keep pace with demand

Supply is limited but growing

Client demand

- ESG Integration
- ESG Products



+ “I want my investment to make a positive impact on society.”



Millennials Agree

Females Agree

# Addressing the Challenges



We identify **3 main hurdles** for broader adoption of Sustainable Investing products:

1. A **knowledge gap**:
  - Confusion over the products available to accomplish sustainable investing goals
  - Wealth advisors that are experiencing a lack of confidence in speaking to their clients on these topics
  - Lack of understanding of the financial impact of incorporating ESG Factors in investment decision making
2. Lack of **availability of impact/ESG investment products** via mainstream distribution channels
3. Insufficient information on financial and sustainability **performance** of funds

---

*People are revisiting the relationship they want their capital to have with the world. For advisors that are willing to evolve their practice, there is tremendous opportunity.*

# How Do Investors Benefit From Using ESG?



ESG factors offer investors added insight into the quality of a company's management, culture, risk profile and other characteristics.

By using ESG analysis and data, an investor can look to **identify companies that are:**

- Industry and corporate responsibility leaders
- Better managed and more forward-thinking
- Focused on long-term performance
- Better positioned to anticipate and mitigate risk
- Aligned with personal values

By considering ESG in the investment process, **investors can achieve:**

- A holistic approach to investing
- Market rate returns
- Potential long-term performance advantages

# Company Examples

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# CMS Energy Corp. – Company Example



## CMS Energy Corporation



ESG REPORT

Industry: **Utilities**

Marketcap.: **13,042 mm. USD**

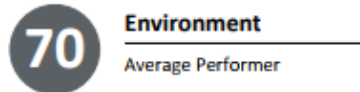
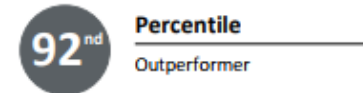
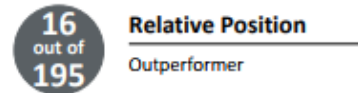
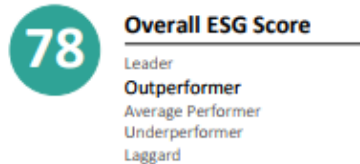
Employees:

Domicile: **United States**

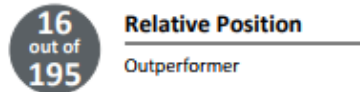
Ticker: **NYSE:CMS**

### ESG Summary

#### Overall Performance



#### Relative Performance



Top 5 Companies	Score
1. Enagás, S.A.	87
2. Red Eléctrica Corporación, S.A.	87
3. EDP - Energias de Portugal, S.A.	85
4. TERN - Rete Elettrica Nazionale Società	84

Peers (Market cap \$13-\$14bn)	Score
EDP - Energias de Portugal, S.A.	85
<b>CMS Energy Corporation</b>	<b>78</b>
Veolia Environnement S.A.	71
FirstEnergy Corp.	60

# CMS Energy Corp. – Company Example



## Key ESG Issues For This Company

Key ESG Issue	Indicator Name	Company Score (out of 100)	Peer Group Average	Leading Practice Average	Leading Practice Gap
<b>Emissions, Effluents and Waste</b>	Environmental Policy	75	51	85	●
	Environmental Management System	100	60	100	●
	Hazardous Waste Management	100	23	56	●
	Air Emissions Programmes	100	32	66	●
	Emissions, Effluents and Waste Events	Category 1	Category 0	Category 0	●
<b>Carbon - Own Operations</b>	Carbon Intensity Trend	25	39	79	●
	CDP Participation	100	39	100	●
	GHG Reduction Programme	100	58	100	●
	Carbon Intensity	0	38	100	●
	Energy Use and GHG Emissions Events	Category 0	Category 0	Category 0	●
<b>Occupational Health and Safety</b>	Health and Safety Management System	100	59	100	●
	Health & Safety Certifications	0	27	86	●
	LTIR Trend	100	53	100	●
	Employee Fatality Rate	100	51	97	●
	Occupational Health and Safety Events	Category 0	Category 0	Category 0	●

● A negative to +25 point gap or Event Category 0-2    ● A 26-74 point gap or Event Category 3    ● A 75+ point gap or Event Category 4-5



# Duke Energy – Company Example



## Duke Energy Corporation



ESG REPORT

Industry: **Utilities**  
Domicile: **United States**

Marketcap.: **58,740 mm. USD**  
Ticker: **NYSE:DUK**

Employees:

### ESG Summary

#### Overall Performance

62

#### Overall ESG Score

Leader  
Outperformer  
**Average Performer**  
Underperformer  
Laggard

83  
out of  
195

#### Relative Position

Average Performer

58<sup>th</sup>

#### Percentile

Average Performer

49

#### Environment

Underperformer

74

#### Social

Outperformer

71

#### Governance

Average Performer

#### Relative Performance

83  
out of  
195

#### Relative Position

Average Performer

Top 5 Companies		Score
1.	Enagás, S.A.	87
2.	Red Eléctrica Corporación, S.A.	87
3.	EDP - Energias de Portugal, S.A.	85
4.	TERNA - Rete Elettrica Nazionale Società	84

Peers (Market cap \$49-\$69bn)		Score
	Enel SpA	73
	<b>Duke Energy Corporation</b>	<b>62</b>
	Dominion Energy, Inc.	62
	NextEra Energy, Inc.	61

# Duke Energy – Company Example



## Key ESG Issues For This Company

Key ESG Issue	Indicator Name	Company Score (out of 100)	Peer Group Average	Leading Practice Average	Leading Practice Gap
Carbon - Own Operations	Carbon Intensity Trend	20	39	79	●
	CDP Participation	100	39	100	●
	GHG Reduction Programme	100	58	100	●
	Carbon Intensity	20	38	100	●
	Energy Use and GHG Emissions Events	Category 0	Category 0	Category 0	●
Emissions, Effluents and Waste	Environmental Policy	75	51	85	●
	Environmental Management System	80	60	100	●
	Hazardous Waste Management	25	23	56	●
	Air Emissions Programmes	50	32	66	●
	Emissions, Effluents and Waste Events	Category 3	Category 0	Category 0	●
Occupational Health and Safety	Health and Safety Management System	100	59	100	●
	Health & Safety Certifications	0	27	86	●
	LTIR Trend	100	53	100	●
	Employee Fatality Rate	50	51	97	●
	Occupational Health and Safety Events	Category 2	Category 0	Category 0	●

● A negative to +25 point gap or Event Category 0-2    ● A 26-74 point gap or Event Category 3    ● A 75+ point gap or Event Category 4-5



Thank you



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## SUSTAINABLE DEVELOPMENT GOALS



# Sustainable Investing Roundup

Austin, TX

11-08-2017

