Stream 1

How are portfolio managers integrating longterm sustainability factors into investment decisions for better returns?

13:00 - 13:50

Milena Glauberzon, Portfolio Manager, Public Equities Portfolio, PSP Investments

Domenico Giuliano, Deputy Chief Investment Officer and Portfolio Manager, MFG Asset Management

Moderator: Sarah Cleveland, Founder & CEO, Sarah Cleveland Consulting

ESG Framework

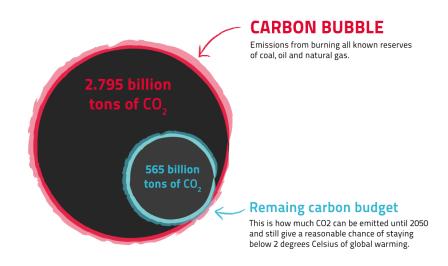
Milena Glauberzon

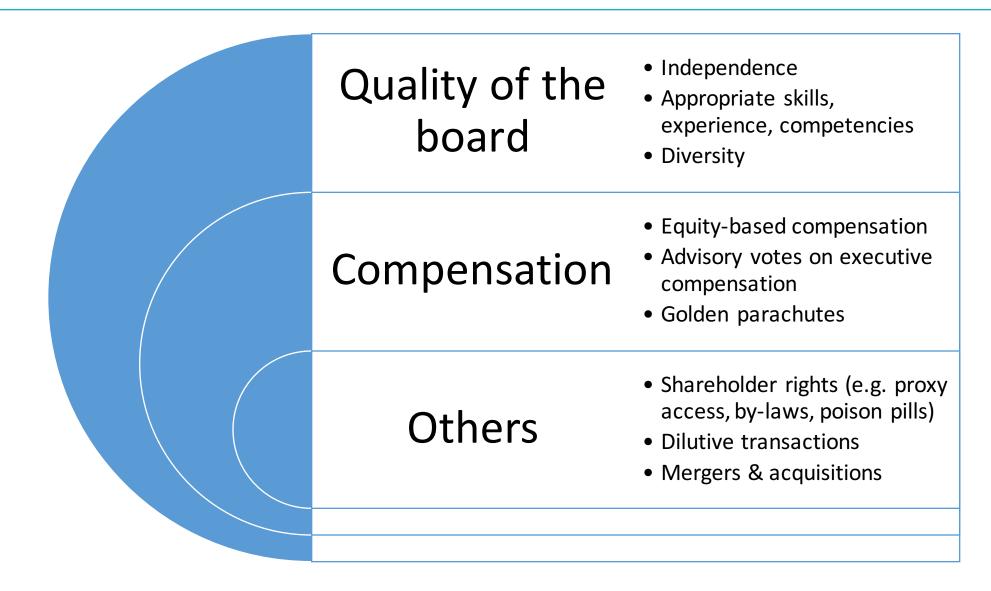
Climate change

Determining investment risks and opportunities for PSP

Current:

- Voting and dialogue
- Case-by-case assessment of CC risks
- Collaboration and advocacy : PRI, CDP, TCFD





Enhanced Due Diligence – 4 assessment types

1. Current carbon performance versus industry/peers

- Peer relative carbon efficiency assessment
- Reliant upon current carbon data (has limitations though is readily available)

2. Quality of climate risk management versus industry/peers

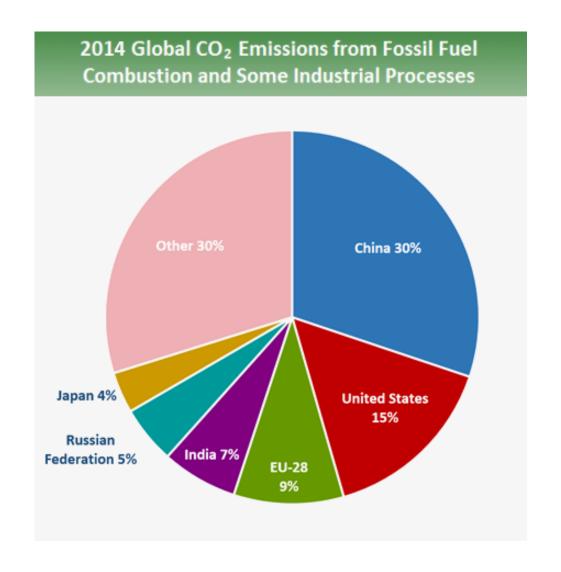
- Qualitative, peer-relative assessment
- 3rd party data on company governance activities (e.g. MSCI)
- 3rd party initiatives which rank sensitive companies (e.g. CDP)

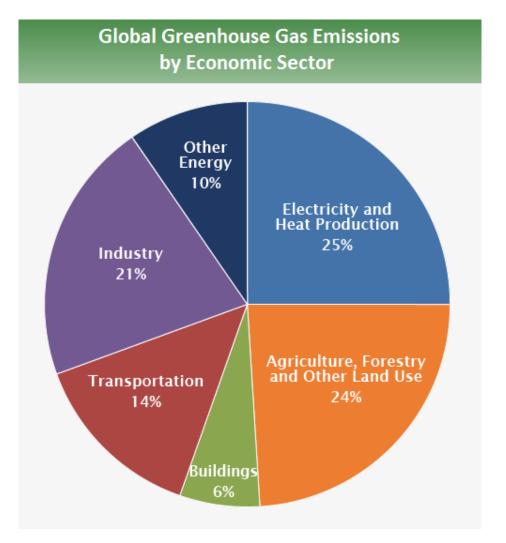
3. Financial resilience risk assessment

- Test sensitivity of NPV to alternate price scenarios or a shadow carbon price
- Consider impact of early plant closures
- Model reduced demand for high-cost, high-carbon FF resources
- Assess cost of production vs peers, or CapEx plans

4. Financial Impact of Reputational risk

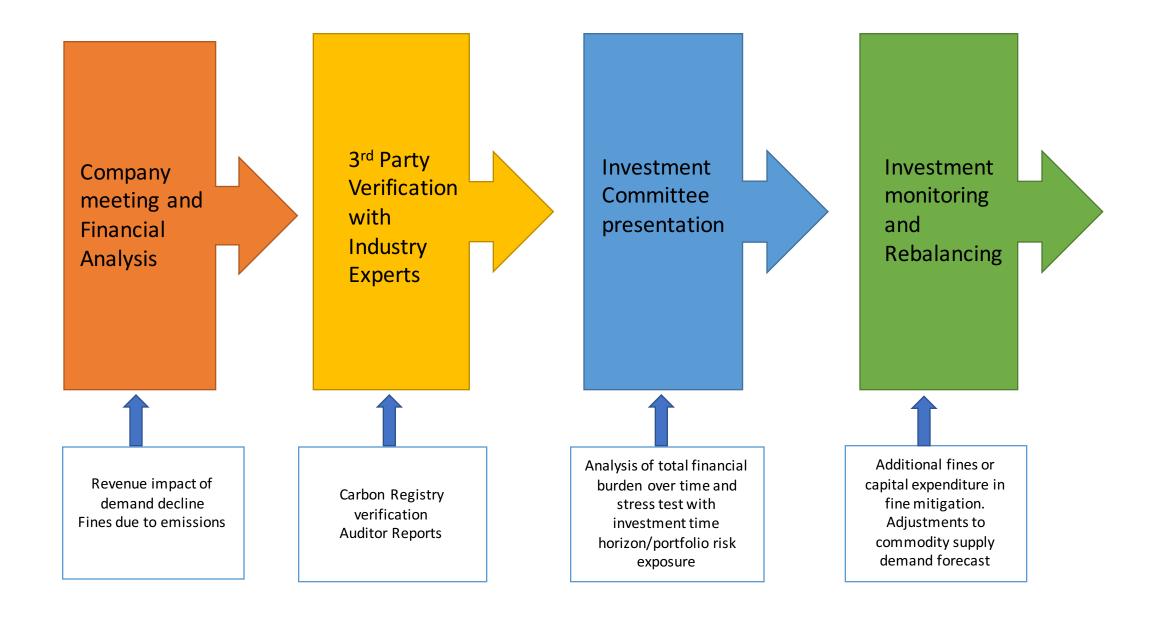
 actors that may pose financial reputational risk to company (e.g. controversies, countries of operation, target of activist groups; Talisman Burma)





Source: EPA.gov

Oil & Gas Investment Example



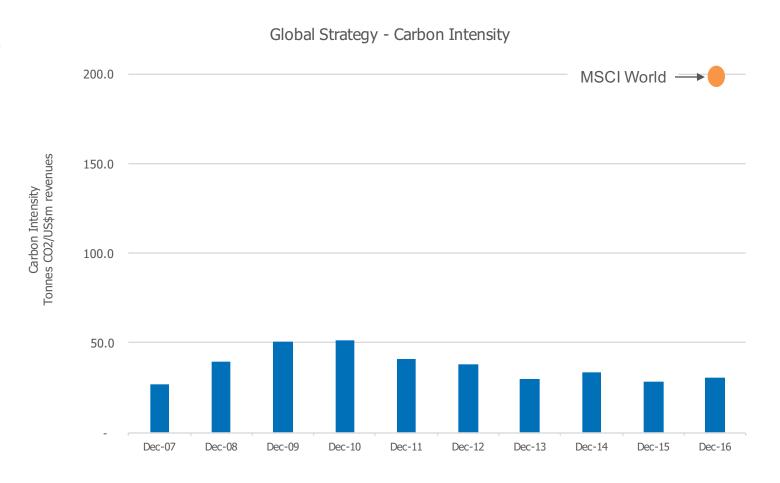




Magellan Global Low Carbon Strategy

Global Strategy has a long low carbon history

- Reasons the Global Strategy is inherently low carbon:
 - Universe excludes
 pro-cyclical resources, energy and
 materials stocks
 - Seeks high returns on capital; often leading to capital-light businesses that are typically less carbon intensive



Note: Emissions intensity calculated using the weighted average intensity method, which is a weighted average of the emissions intensity of all companies in the portfolio. Source: Trucost; MSCI; Magellan Asset Management Limited.

Magellan Global Low Carbon Strategy

Global Strategy's history shows low carbon need not come with lower alpha

Observations (Gross) ¹	Total Return (% p.a)	Beta	Downside Capture
3 years	10.37	0.68	0.34
5 years	12.93	0.78	0.38
7 years	15.06	0.68	0.35
10 years	11.82	0.73	0.53

eVestment Percentiles (Gross) ¹	Total Return	Beta	Downside Capture
3 years	22nd	83rd	83rd
5 years	24th	85th	86th
7 years	2nd	92nd	95th
10 years	1st	91st	98th

Source: eVestment, quarterly returns period ending 30 September 2017. The eVestment Global Large Cap Equity peer group presented contains 354, 314, 249, and 179 observations for 3, 5, 7 and 10 years respectively.

Low Carbon Framework

A proprietary three tiered approach to portfolio construction



Fossil fuels exclusions (Scope 3)

Portfolio emissions cap

Pragmatic flexibility to evolve with global climate goals and market dynamics

Definitions:

Scope 1 emissions: directly emitted by companies

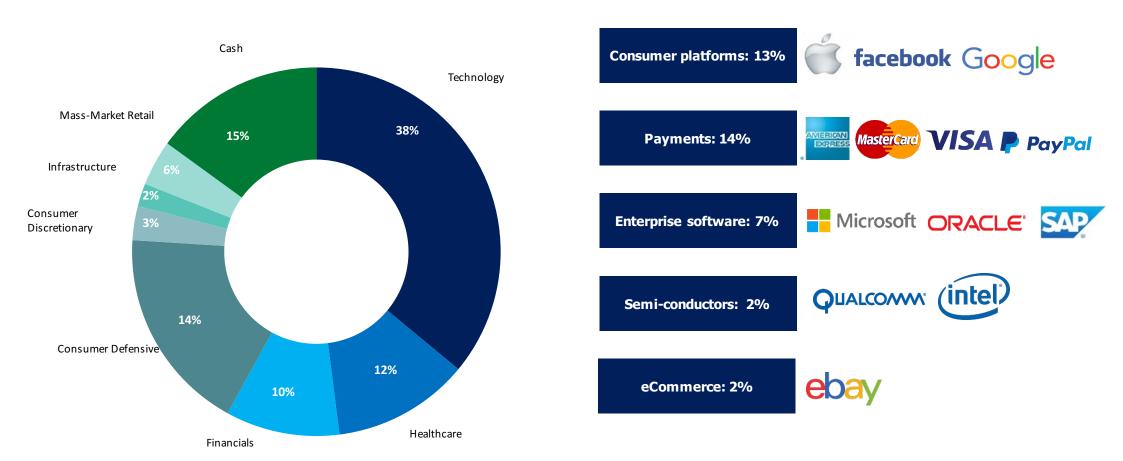
Scope 2 emissions: indirect emissions from energy suppliers (eg electricity)

Scope 3 emissions: other indirect emissions from non-energy suppliers or use of products sold

How Are We Positioned?

Global Low Carbon Strategy

38% of portfolio in global technology, yet well diversified



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Stream 1

Water risk: whether it's too much rain/sea water or too little freshwater, water is becoming a serious risk to business continuity, viability and insurance.

13:55 - 14:45

Hugh Brown, Corporate Governance Analyst, Office of Investment Programs & Governance, **State Board of Administration (SBA) of Florida**

Stephen Kibsey, Vice President, Emerging Risk Management, Caisse de dépôt et placement du Québec (CDPQ)

Emilie Mazzacurati, Founder and Chief Executive Officer, Four Twenty Seven

Moderator: Siobhan Collins, Manager, Water Program, Ceres

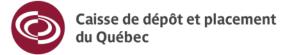
Challenges with Water Risk Assessments

RI Americas | New York

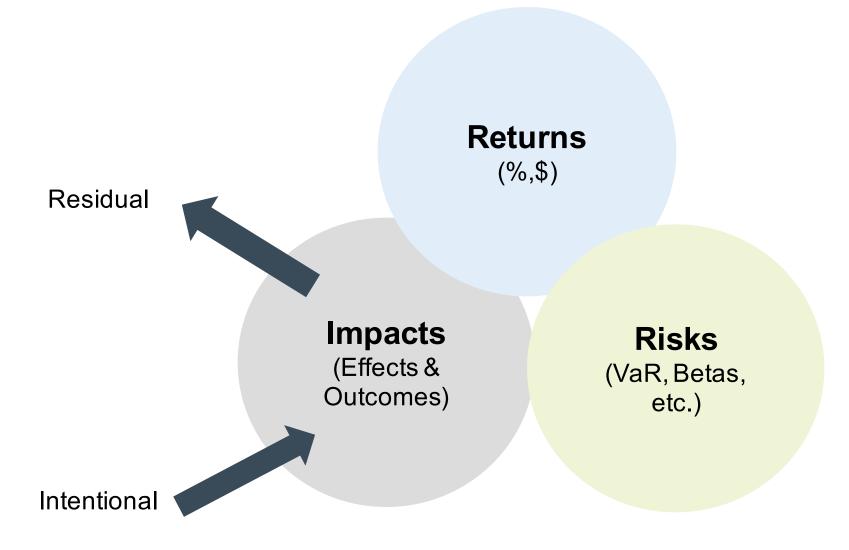
December 6-7, 2017

STEPHEN KIBSEY, VICE-PRESIDENT OF EMERGING RISK MANAGEMENT





New Era in Sustainable Investing



Impacts- need to be measured

Sustainable Development Goals









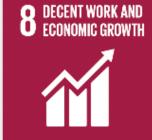


Source: UNITED NATIONS













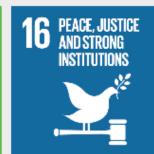








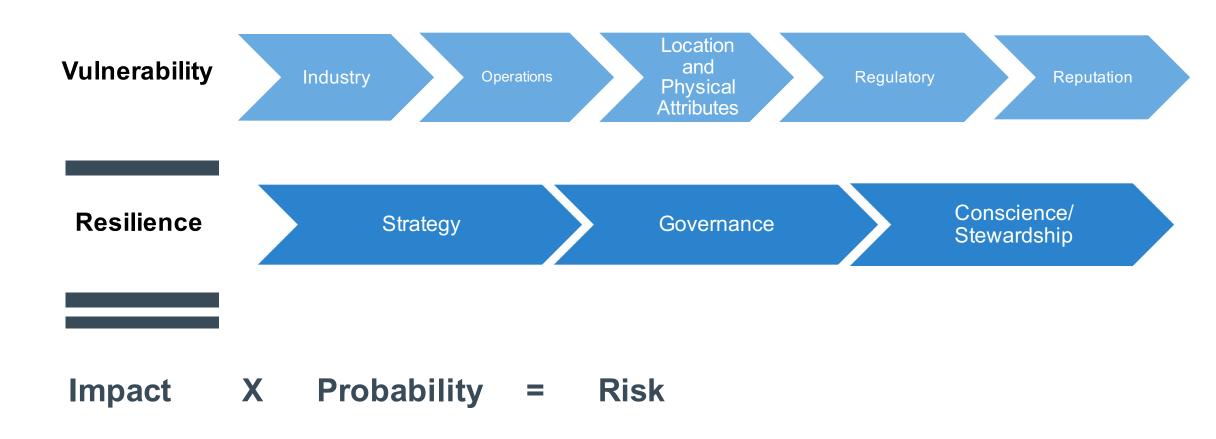






Process for judging materiality of the risk

Analytic tool concept

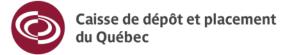


Thank you for listening

RI Americas | New York December 6-7, 2017

STEPHEN KIBSEY
VICE-PRESIDENT OF EMERGING RISK MANAGEMENT

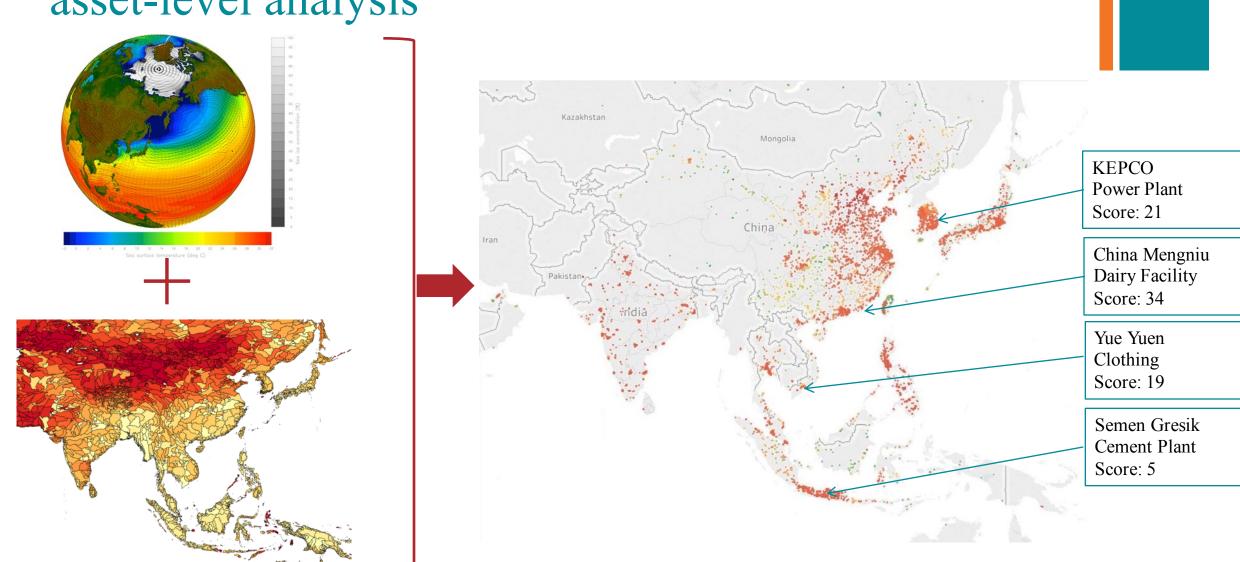






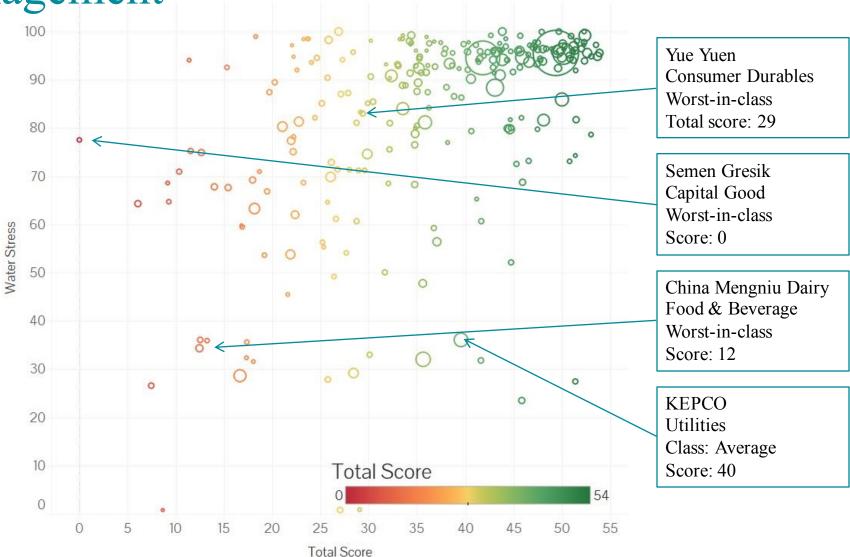
Assessing Climate Risk in Financial Portfolios: The Example of Water Risk

Emilie Mazzacurati, Founder and CEO, Four Twenty Seven Responsible Investors Americas, December 2017 + From water and climate data to financial intelligence: asset-level analysis



+ Identify high risk corporations for engagement and

risk management





Climate intelligence for financial institutions, business and government

Emilie Mazzacurati – 427mt.com – emazzacurati @427mt.com



Ceres' Investor Water Toolkit:

A Resource for Investors by Investors on Water Integration



How-To Guide

Provides investors with a decision-making 'how-to' guide to assist them in understanding water risks in their portfolio



Risk Assessment

Helps investors discriminate between high and low water risk companies and securities, and provides risk mitigation and engagement ideas



Resources

Provides guides, case studies, resource lists and databases on specific topic areas or asset classes



One Platform

Creates a one-stop shop on water integration across the value chain, from asset class analysis, portfolio characterization to buy/sell decision-making



Easy Access

Exists on a web-based platform that will incorporate evolving water integration best practices, ideas and resources as they improve over time



For more information: www.ceres.org/investorwatertoolkit

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Afternoon networking break

14:45 - 15:15

Sponsored by:



Stream 1

Smart beta: ESG issues are the underresearched value factors that investors are searching for!

15:15 - 16:05

Brian Rice, Portfolio Manager, California State Teachers' Retirement System (CalSTRS)

Tony Campos, Head of ESG Americas, FTSE Russell

Moderator: Dan Winters, Head of Americas, GRESB

Smart Beta Survey 2017: key themes

Why smart beta?

Our survey results indicate that risk reduction, return enhancement and improving diversification persist as the primary objectives for use of smart beta. Cost savings continues to grow in importance, indicating that smart beta is increasingly being used in place of active strategies.

Primary objectives

- ✓ RETURN ENHANCEMENT
- ✓ RISK REDUCTION
- ✓ IMPROVE DIVERSIFICATION

Smart beta evolution and adoption

Smart beta adoption rates increased from 2016 to 2017; now, nearly half of asset owners surveyed have a smart beta allocation. Adoption growth was fueled by a record number of asset owners evaluating smart beta in 2016. Looking forward, the pipeline of asset owners evaluating smart beta remains strong and is comprised of first-time evaluators, reevaluators, and asset owners with an existing smart beta allocation who are considering allocations.

Equity smart beta strategies

This year, multi-factor combination strategies have become the most popular smart beta equity strategy used; they are also the most widely evaluated smart beta equity strategy. Among single factor strategies, Value and Low Volatility are most widely used and evaluated.

Fixed income smart beta strategies

New in 2017, we introduce an analysis of smart beta evaluation and usage for fixed income. Industry consensus about a well-defined set of factors that have historically rewarded investors has not taken place yet for the debt markets; as such, far fewer asset owners indicated they have evaluated smart beta for fixed income. We expect evaluation and usage of fixed income smart beta strategies to grow from this year's baseline.

Interest in applying ESG consideration

ESG considerations of

smart beta

Interest in applying ESG considerations to smart beta is measurable, with the greatest interest coming from European asset owners and asset owners with over \$10 billion in AUM. Primary motivations for using a smart sustainability strategy are investment-led rather than regulatory or social/ethical.

Global adoption



Use of multi-factor strategies

2015	20%		
2016		37%	
2017			64%

Adoption and evaluation

7%	Allocated now
20%	Will evaluate allocation
	No allocation or plan

Interest is worldwide

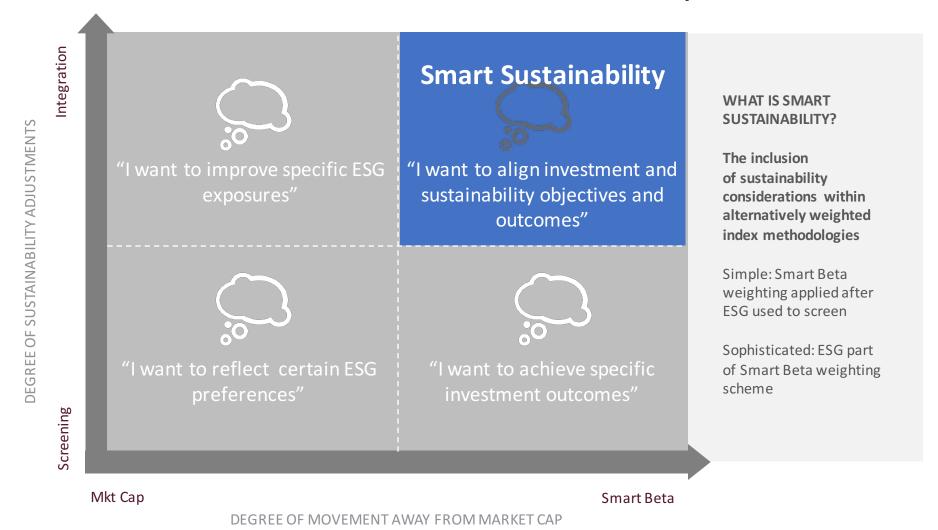




Outlook

We expect growth in smart beta to continue at a robust pace, as the adoption expectations of asset owners who are currently evaluating initial or additional smart beta allocations remains strong and satisfaction with smart beta among current users remains high. In particular, we see strong growth prospects in the usage of multi-factor combination strategies and the application of ESG considerations to smart beta.

Smart beta and sustainability



Source: FTSE Russell

Smart Sustainability construction



Source: FTSE Russell

FTSE Russell 57

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THE END OF DAY ONE

Stream 1

Applying a long-term sustainable approach to fixed income investing.

09:40 - 10:30

Marcelo Jordan, Senior Portfolio Manager (ESG), The World Bank

Tessie Petion, Vice President, Responsible Investment Research, Domini Impact Investment

Del Anderson, Credit Research Analyst, PIMCO

Moderator: Carol Jeppesen, Senior PSNetwork Manager, Principles for Responsible Investment (PRI)

Morning networking break

10:30 - 11:10

Stream 1

Green & sustainable bonds: After the initial excitement, what is holding back issuance?

11:10 - 12:00

Judith Moore, Head of Sustainability Research and Policy, Affirmative Investment Management

Daniel Shurey, Analyst, Bloomberg New Energy Finance

Irene Sánchez Aizpurúa, Head of Division, Investor Relations and Marketing, European Investment Bank

Moderator: Tony Hay, Publisher, Responsible Investor

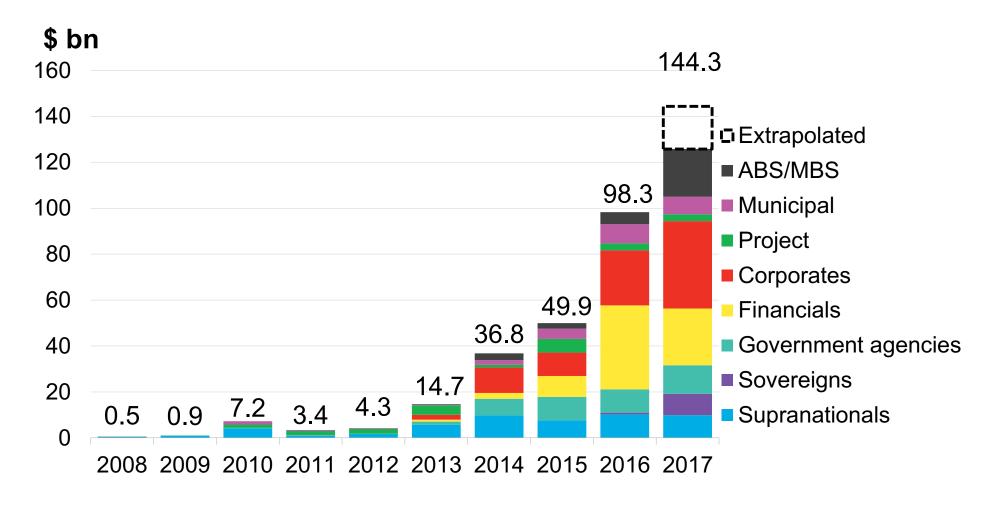
Green bonds overview

RI Americas 2017

Dan Shurey

December 7, 2017

Green bond issuance (\$bn)



Source: Bloomberg New Energy Finance

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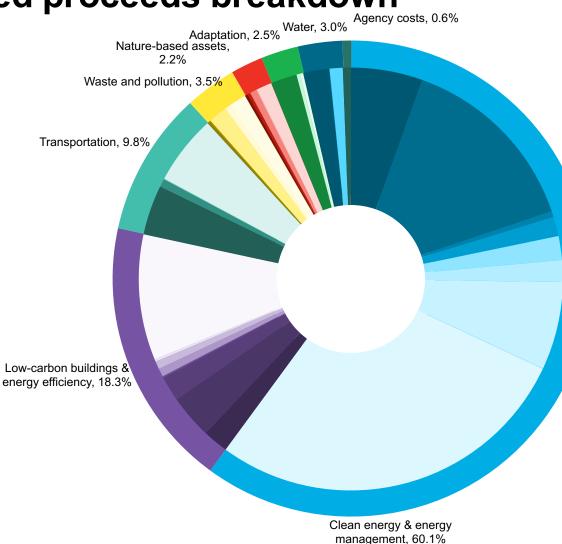
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Reported proceeds breakdown



Source: Bloomberg New Energy Finance Note: Proceeds for reported bonds 1H 2014-1H2016

- Solar
- Wind
- Geothermal
- Hydropower
- Bioenergy (and waste to energy)
- Cogeneration
- Energy Distribution & Management
- Energy Storage
- Mixed Energy
- Residential
- Commercial & Industrial
- Public
- Universities (Private)
- Data Centers
- Retrofit
- Energy Efficiency Processes
- Energy Efficiency Products (LED lighting)
- Mixed Low-Carbon Buildings & EE
- Mass Transit
- Vehicles
- Cycling
- Alternative Fuel Infrastructure
- Mixed Transportation
- Recycling
- Disposal
- Prevention
- Reuse
- Pollution Control
- Clean Coal
- Mixed Waste
- Agriculture
- Forests (managed and unmanaged)
- Fisheries and Aquaculture
- Land Remediation
- Mixed Nature & Biodiversity
- Territorial Adaptation (green spaces & tree planting)
- Water Management Inland / Flood Prevention
- Coastal Management
- Insurance
- Information Support Systems
- Mixed Adaptation
- Built (gray) Infrastructure Wastewater Treatment
- Water Usage Management (Reduction, Recycling & Efficiency)
- Mixed Wate
- General corporate purpose
- Agency costs

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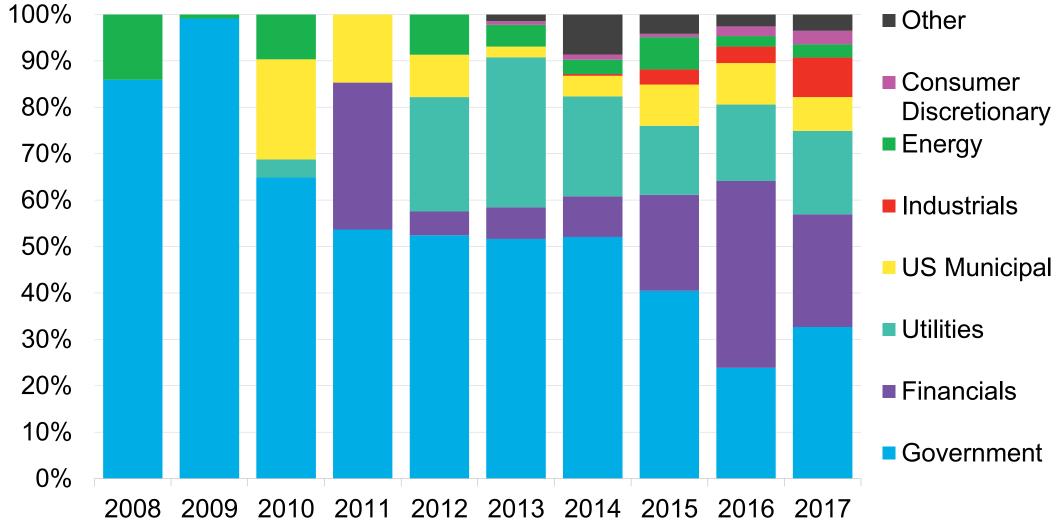
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Green bond issuer type (%)



Source: Bloomberg New Energy Finance

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Dan Shurey dshurey1@bloomberg.net

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Moderator: Tony Hay, Publisher, Responsible Investor

Stream 1

What are the methods to incorporate sustainability factors successfully within passive investment?

13:00 - 13:50

Bob Arnold, Director of Global Equities, New York State Common Retirement Fund

Jennifer Sireklove, Director of Responsible Investing, Parametric

Moderator: Thomas Kuh, Independent Consultant

Stream 2

Why and how are investment consultants and asset owners assessing ESG integration in asset allocation, manager selection and review?

13:00 - 13:50

Roger Urwin, Global Head of Investment Content, Willis Towers Watson

Karen Lockridge, Principal, Mercer

Kate Starr, Chief Investment Officer, Flat World Partners

Moderator: Nalini Feuilloley, Head of Canada, Principles for Responsible Investment (PRI)