



ESG Investing

WORKSHOP ON GLOBAL ESG INVESTMENT MARKET AND PRODUCTS

OVERSEAS BUSINESS INSTITUTE
TAIWAN ACADEMY OF BANKING AND FINANCE

DR JUDITH STROEHLE

JUNE, 2022

Your instructor

Dr Judith Stroehle

Judith Stroehle is a Senior Researcher and Programme Lead of the Rethinking Performance Initiative at the Saïd Business School in Oxford, where her research broadly focusses on the role of finance, measurement and reporting for implementing responsible business. Her recent work explores issues such as the methods, benefits and challenges of non-financial measurement and accounting, sustainable investing and ESG engagement strategies, and the relationships between diverse sets of frameworks, standards and measures (ESG, SDG, Integrated Reporting, SASB, GRI, Impact Valuation, etc.). Previously she worked in the Oxford-Mars Mutuality in Business project and co-established the Oxford Impact Roundtable for sustainability reporting and accounting in 2018.

Judith holds a doctoral degree (PhD Europeaus) in Economics and Sociology for which she examined the Auditability of Social Standards in Global Supply Chains at the University of Milan in cooperation with the International Labour Office (ILO). Previous to her research track, Judith worked for several years as international business developer in the German online start-up scene and as a data strategy analyst and consultant for international channel marketing. Judith engages and works with several non-profits, companies and asset managers on their non-financial strategies, reporting and measurement practices.



Course Outline

- Session I ESG Measures, Methods and Ecosystem
Equity Research: Reporting Frameworks
- Session II Standards and Regulation
Materiality
- Session III Investment Strategies
Public Equity / Credit Markets
- Session IV Stewardship and Engagement



ESG Investing

INTRODUCTION

DR JUDITH STROEHLE



WHY THINK ABOUT ESG AT ALL?

Increasingly we are dealing with problems that have two problematic characteristics, if you look at them from a “traditional” shareholder value maximization perspective:

1. Challenges that are **long-term**, often intergenerational.
2. Challenges that are **systemic**, that we cannot diversify away from.
3. Challenges that are **stakeholder-related** and that require partnerships to be addressed.

→ **New risks and opportunities.**

→ **New information & new notions of performance.**

WHY DO WE CARE? SYSTEM LENS

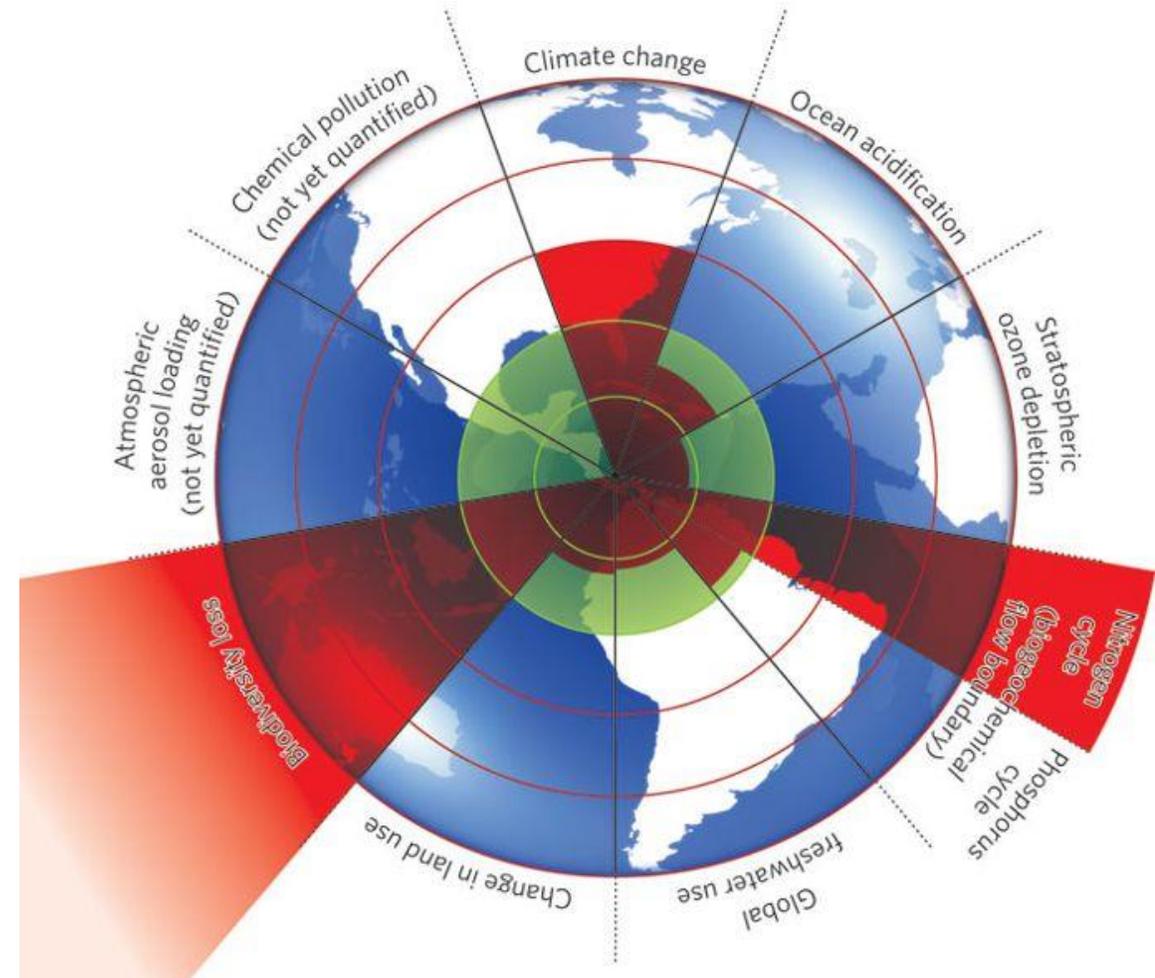
Johan Rockström (et al) 2009: A safe operating space for humanity.

Planetary Boundaries: identifying biophysical boundaries that are intrinsic to the operation of Earth as a system

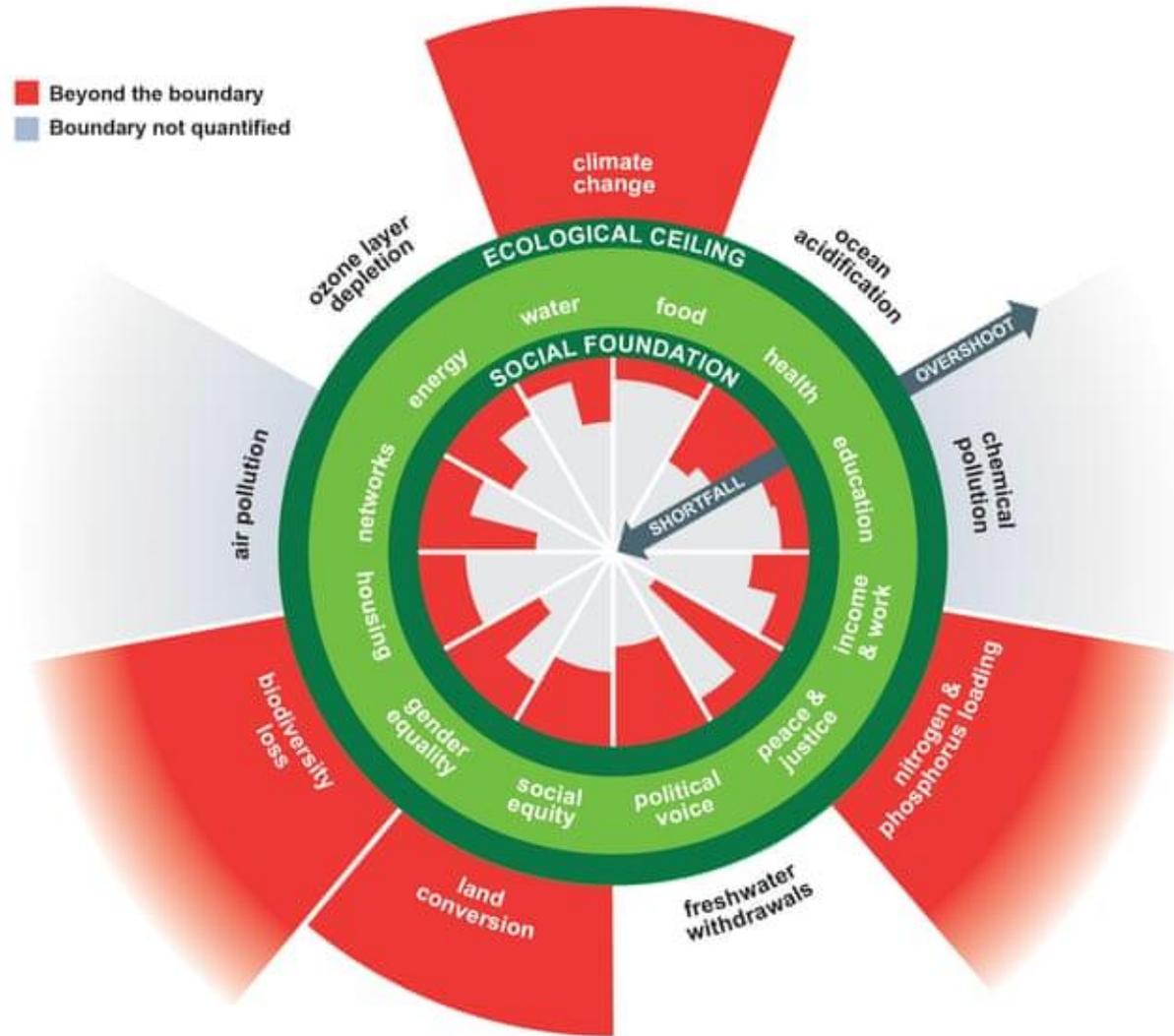
The original scientific questions we posed were:

1. What environmental processes regulate the stability of the Earth system?
2. Do these processes have well-defined thresholds at global or regional levels, or do they contribute significantly to the resilience of the Earth System?
3. What boundary positions do they have?

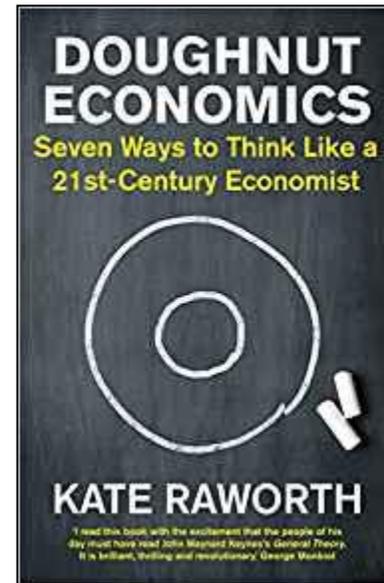
A scientific effort to identify the ample evidence that Earth not only is a coupled self-regulating system, but also a system with finite limits.



SYSTEM LENS COMPLEXITY



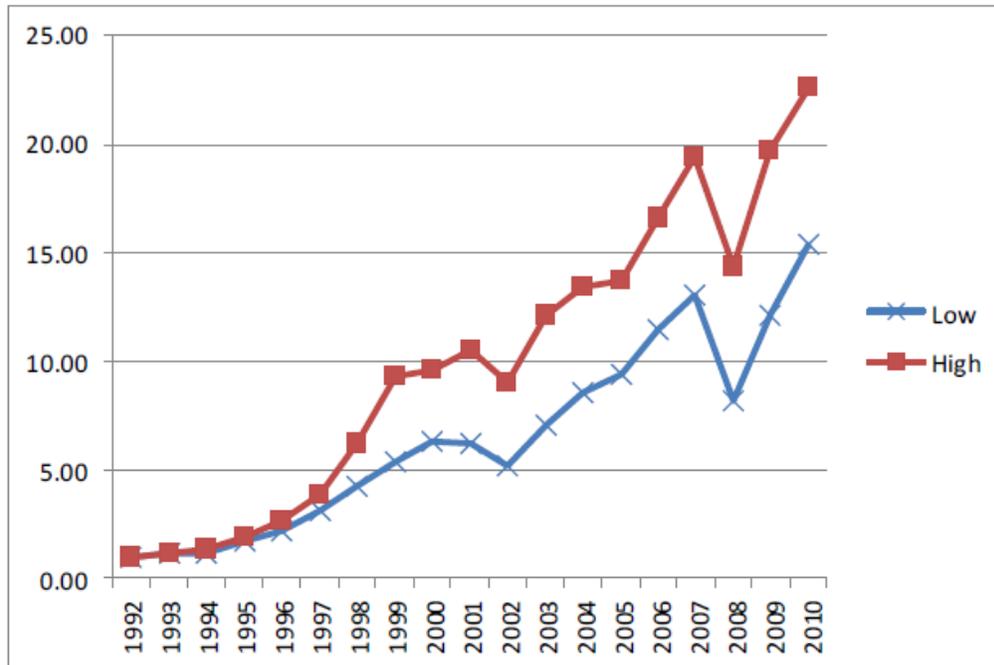
“Meeting the needs of all within the means of the planet”
(Raworth, 2017)



WHY SHOULD COMPANIES CARE? ECONOMIC LENS

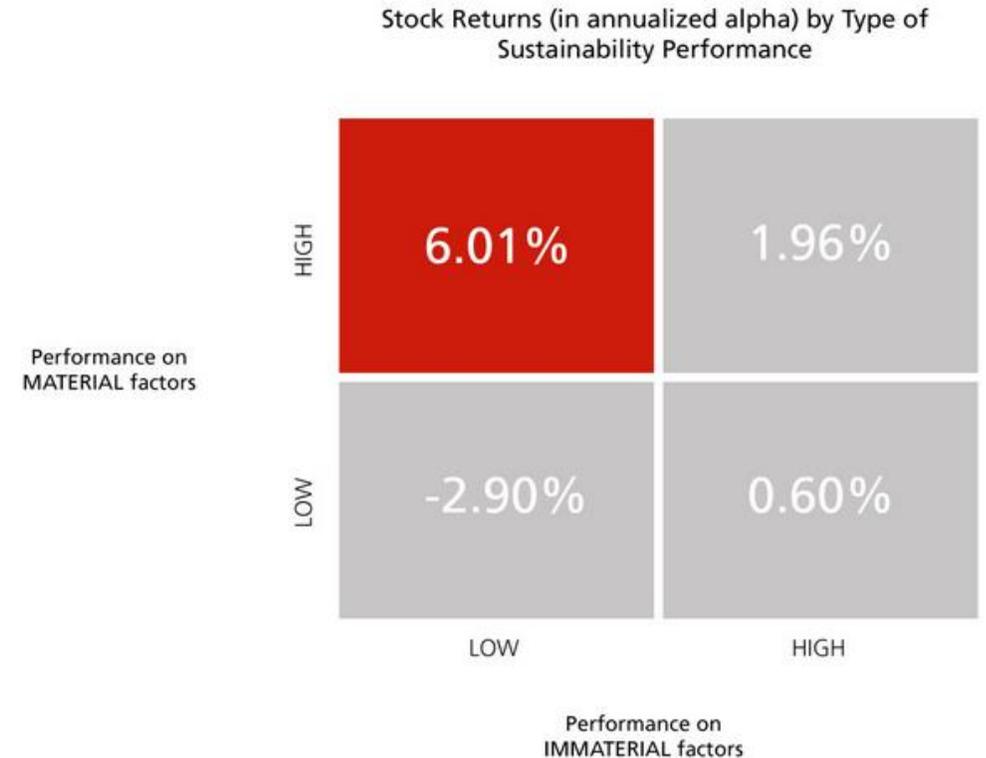
Weak vs. strong ESG Performance

Evolution of \$1 invested in the stock market in value-weighted portfolios



Eccles, Robert G., Ioannis Ioannou, and George Serafeim. "The Impact of Corporate Sustainability on Organizational Processes and Performance." *Management Science* 60, no. 11 (November 2014): 2835–2857.

... and performance on Material factors have a financial impact.



Mozaffar Khan, George Serafeim, and Aaron Yoon (2016) *Corporate Sustainability: First Evidence on Materiality*. *The Accounting Review*: November 2016, Vol. 91, No. 6, pp. 1697-1724.

WHY SHOULD COMPANIES CARE?

Intangible Value is becoming more important in Business

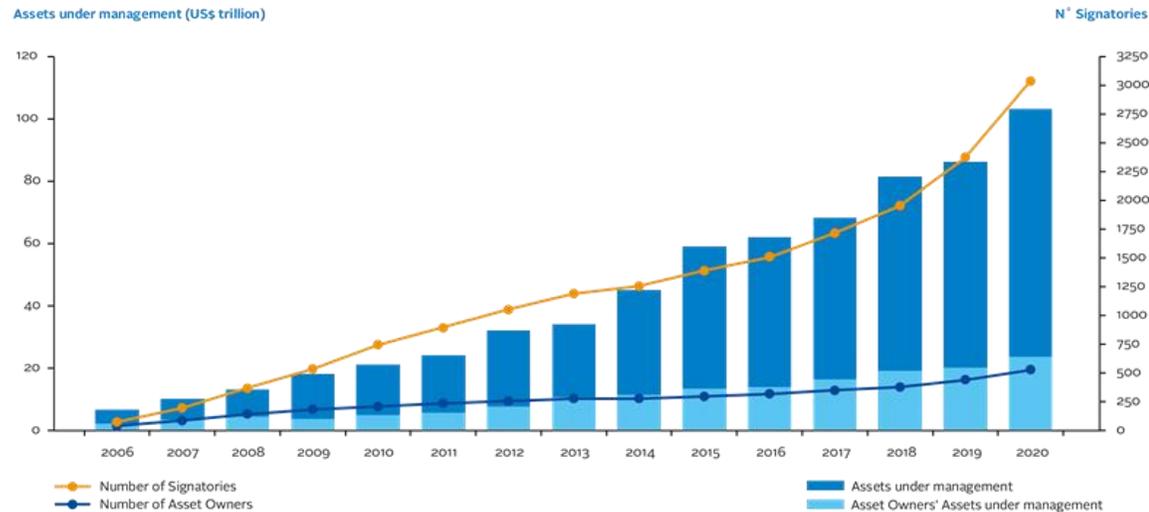
Tangible Assets vs. Intangible Assets for S&P 500 Companies, 1975 - 2018

<p>Tangible Assets</p> <ul style="list-style-type: none">▪ Easy to value▪ Thick & efficient secondary markets▪ Insurable
<p>Intangible Assets</p> <ul style="list-style-type: none">▪ Difficult to value▪ Thin & inefficient secondary markets▪ Difficult to Insure



WHY SHOULD COMPANIES CARE?

Investors and Markets care



Signatories with over 100 trillion USD in AUM.

FINANCIAL MARKETS

The Investor Revolution

by Robert G. Eccles and Svetlana Klimenko

FROM THE MAY-JUNE 2019 ISSUE

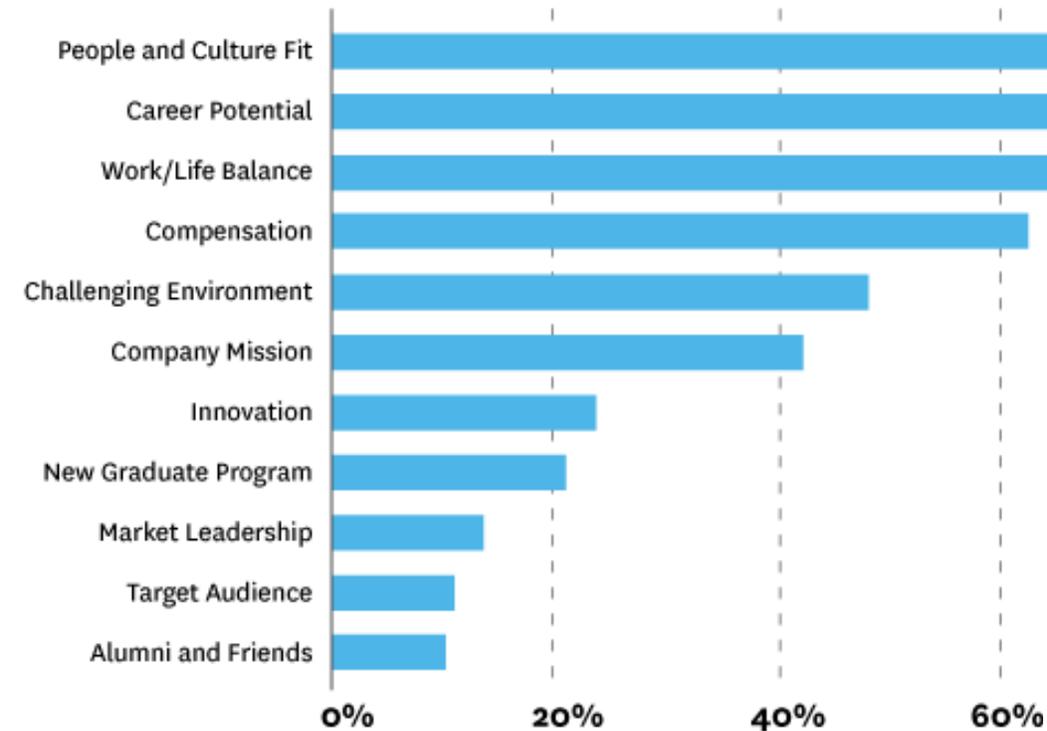
Summary Save Share Comment 2 Text Size Print \$8.95 Buy Copies

Most corporate leaders understand that businesses have a key role to play in tackling urgent challenges such as climate change. But many of them also believe that pursuing a sustainability agenda runs counter to the wishes of their shareholders. Sure, some heads of large investment firms say they care about sustainability, but in practice, investors, portfolio managers, and sell-side analysts rarely engage corporate executives on environmental, social, and governance (ESG) issues. The impression among business leaders is that ESG just hasn't gone mainstream in the investment community.

This perception is outdated....

WHY SHOULD COMPANIES CARE?

WHAT MILLENNIALS LOOK FOR IN EMPLOYERS



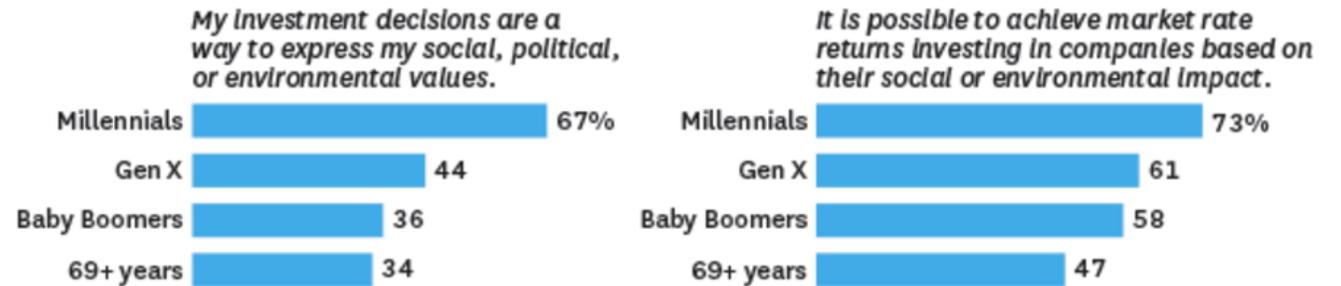
SOURCE COLLEGEFEED

Talent and employees cares

MILLENNIALS WANT TO HAVE AN IMPACT

Different generations have dramatically different investment priorities.

PERCENTAGE OF RESPONDENTS WHO AGREE



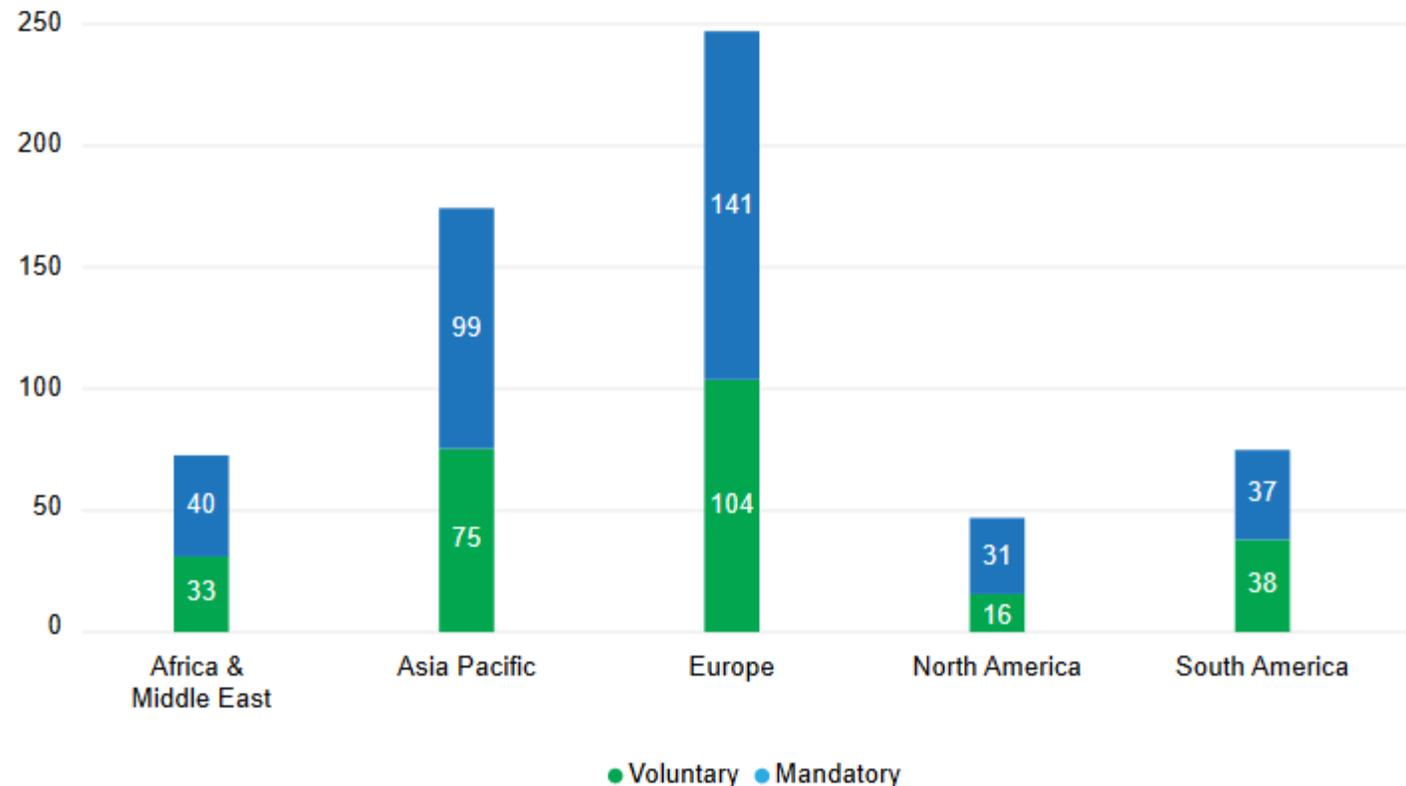
SOURCE 2014 U.S. TRUST INSIGHTS ON WEALTH AND WORTH

HBR.ORG

WHY SHOULD COMPANIES CARE?

Regulators (increasingly) care

Figure 9 - Number of voluntary vs mandatory provisions by region (2020)



Europe is leading the way, but Asia catching up quickly

Risk and Opportunities.

- Green/clean tech / Tech as problem solver
- Innovation markets and future demand
- Bottom of the Pyramid sectors
 - Housing/Health/Education
 - (Micro-)Finance and mobile money
- New (privatised) welfare models
- Developing country infrastructure
- Distributed utilities and energy
- Lease/shared ownership models



Define your Priorities.

If you had to chose TWO UNIVERSAL PRIORITIES that you would want to include in your investment analysis:

- What would these be?
- Why are they important?
- How would you measure these?

Frame your thinking.

Suggested Reading

- Vörösmarty, C. J., Rodríguez Osuna, V., Koehler, D. A., Klop, P., Spengler, J. D., Buonocore, J. J., Cak, A. D., Tessler, Z. D., Corsi, F., Green, P. A. & R. Sánchez (2018), 'Scientifically assess impacts of sustainable investments: Metrics can inform investors wary of "green washing"', *Science*, 359: 523 – 525.
- Mayer, C. (2018), *Prosperity – Better Business Makes the Greater Good* (Oxford, Oxford University Press).
- Raworth Kate (2017) *Doughnut Economics. Seven ways to think like a 21 century economist.* Oxford University Press
- Mozaffar Khan, George Serafeim, and Aaron Yoon (2016) *Corporate Sustainability: First Evidence on Materiality.* *The Accounting Review*: November 2016, Vol. 91, No. 6, pp. 1697-1724.
- Eccles, Robert G., Ioannis Ioannou, and George Serafeim. "The Impact of Corporate Sustainability on Organizational Processes and Performance." *Management Science* 60, no. 11 (November 2014): 2835–2857.
- Karl Polanyi 1944 *The Great Transformation.* Chicago University Press
- Paul Collier 2018 *The Future of Capitalism: Facing the New Anxieties.* Oxford University Press
- Eccles and Klimenko, 2019, *The Investor Revolution.* Harvard Business Review
- Dorobantu and Flemming, 2017, *It's Never Been More Important For Big Companies to Listen to Local Communities.* Harvard Business Review

SESSION I: ESG MEASURES, METHODS AND ECOSYSTEM

DR JUDITH STROEHLE



ESG Investing

What is ESG?



Environmental

- Climate Change
- Deforestation
- Resource Depletion
- Waste and Pollution
- Biodiversity



Social

- Income Inequality
- Labour Standards
- Local communities
- Health & Safety
- Diversity
- Culture and Conflict



Governance

- Board diversity
- Executive pay
- Bribery and corruption
- Due diligence processes
- Political lobbying and donations
- Tax strategy

History of ESG

- ▶ First coined by the UN Global Compact (2004) and UNEP FI (2005).



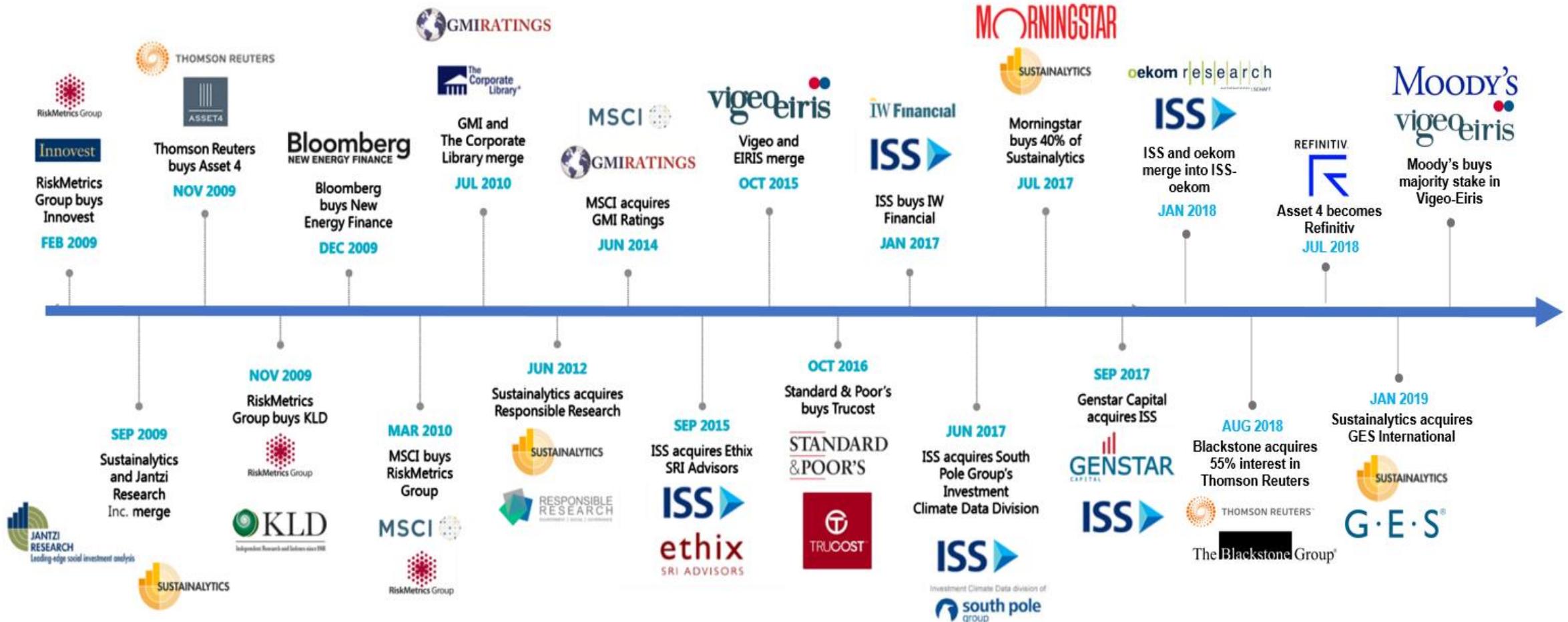
“Recommendations by the financial industry to better integrate environmental, social and governance issues in analysis, asset management and securities brokerage”

- ▶ Belief that there is more than financial performance to be considered when evaluating and valuating a company, portfolio, investment, particularly in the areas of environmental, social and governance.
- ▶ Later adopted by rating & ranking industry and, in particular, investors.
- ▶ Beyond that: **No agreed definition or specification.**

History of ESG

- ▶ Socially Responsible Investing (SRI) emerges in 1960 – 1970
- ▶ Usually normative concerns, such as investments in Apartheid South Africa, Weapons (Vietnam War), Tobacco and Alcohol (church movements).
- ▶ Early pioneers often with narrow focus, laborious methods
- ▶ Shifting focus from narrower on broader issues: ESG
- ▶ Technology allowed for creation of larger universes and wider assessments
- ▶ Mainstream forced consolidation on a fragmented market

History of ESG data: consolidation



History of ESG

→ Data becomes more and more important: “Mainstreaming”

- 89 trillion US\$ in assets under management by signatories to the United Nation’s PRI
- Assets under management in U.S.-based SRI strategies climbed to \$12 trillion at the start of 2018, representing 1 in 4 dollars of all professionally managed AUM
- ESG funds in Europe forecast to outnumber conventional funds by 2025 (15 – 57%)
- Regulatory environment changes: EU taxonomy, NFRD, IFRS, etc.

→ Used by asset owners, asset managers, companies and other stakeholders

ESG

Category of data that contains measurement of environmental, social and governance inputs and outputs of firms, which is commonly used to assess their sustainability management, long-term focus, and/or ethical responsibility.

ONE SIZE DOES NOT FIT ALL:

Rating & Ranking Industry

- Creation of indices and rankings with proprietary methods
- Advising companies and investors on ESG strategies

Investors

- Socially responsible investments (SRI)
- Portfolio selection and fundamental analysis
- Engagement and ESG integration
- Risk analysis, long-term investment decisions

Companies

- Company disclosure beyond financial reporting
- Risk analysis, long-term investment decisions
- Communications, reputation management
- Multi-asset management

Other Stakeholders (NGOs, Governments)

- Pressuring companies on low performance topics
- Evidence points for regulatory and advocacy actions

- Consulting Firms
- Big 4 Accounting Firms
- Investment Intermediaries
- Employees and Workers
- Suppliers
- Communities
- Various International Organizations

How is ESG data collected?

Proprietary Methodologies include

Data collection

- Interviews with companies
- Surveys from data vendors to companies
- Sustainability reports and mainstream filings
- Corporate websites
- Third-party sources (newspaper reports, NGOs)

Feedback

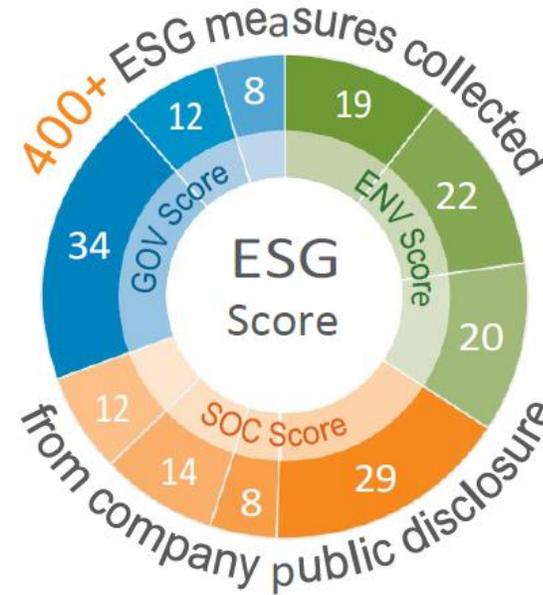
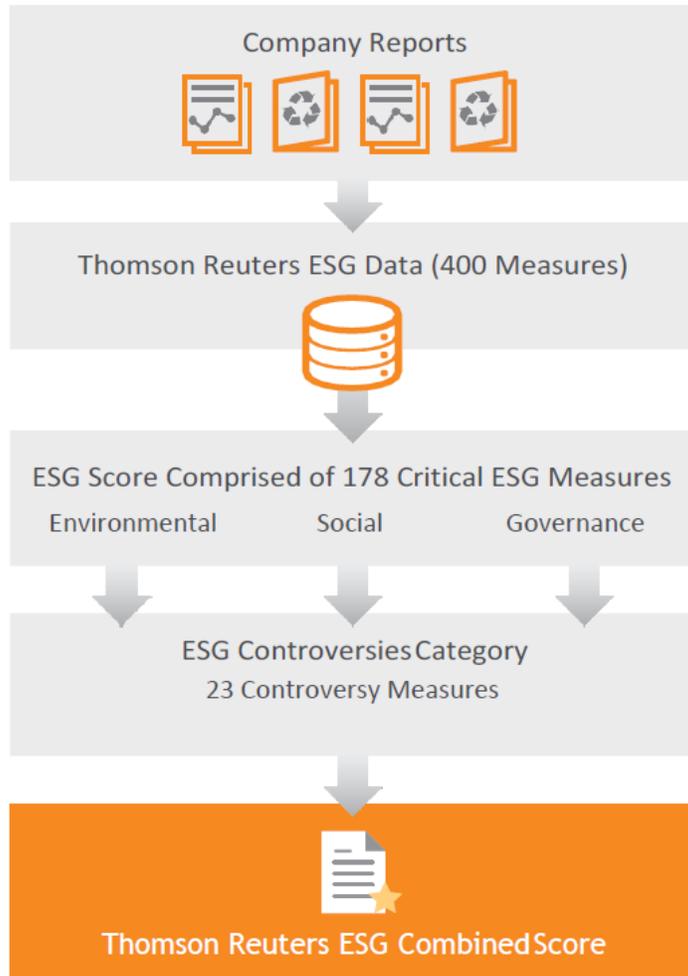
- Company feedback loops
- Analyst assessments

Quality Assurance

- If variance high / company particularly controversial

ESG data creation

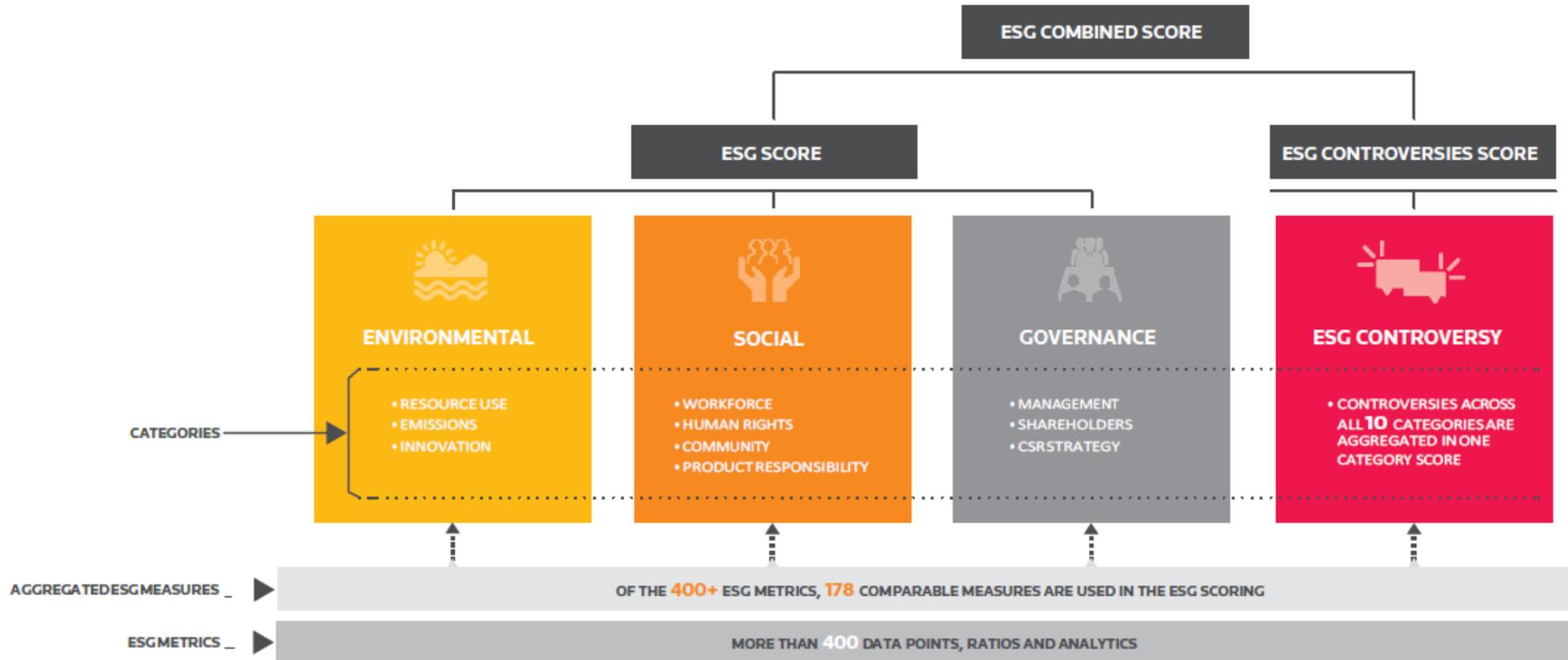
From data collection to ESG



- Environmental
 - Resource Use
 - Emissions
 - Innovation
- Governance
 - Management
 - Shareholders
 - CSR Strategy
- Social
 - Workforce
 - Human Rights
 - Community
 - Product Responsibility

ESG data creation

Data structure



ESG data creation

Example: MSCI, Sustainalytics and Oekom examples





Is this objective?

Why do stakeholders use ESG data?

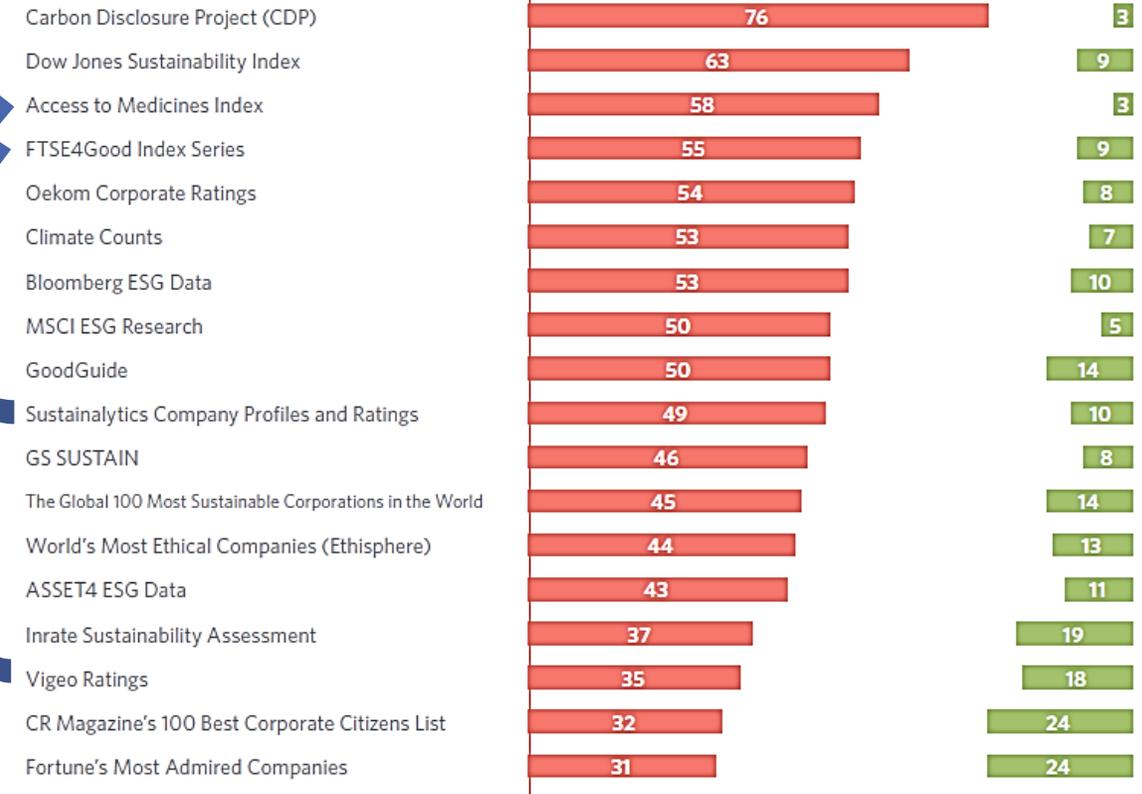
- ESG makes accountability for corporate action tangible
- ESG makes an objective assessment of intangibles
- ESG goes beyond corporate disclosure
- ESG gives us easy access to information previously opaque or very difficult to gather

But does it...?

The Problem with ESG



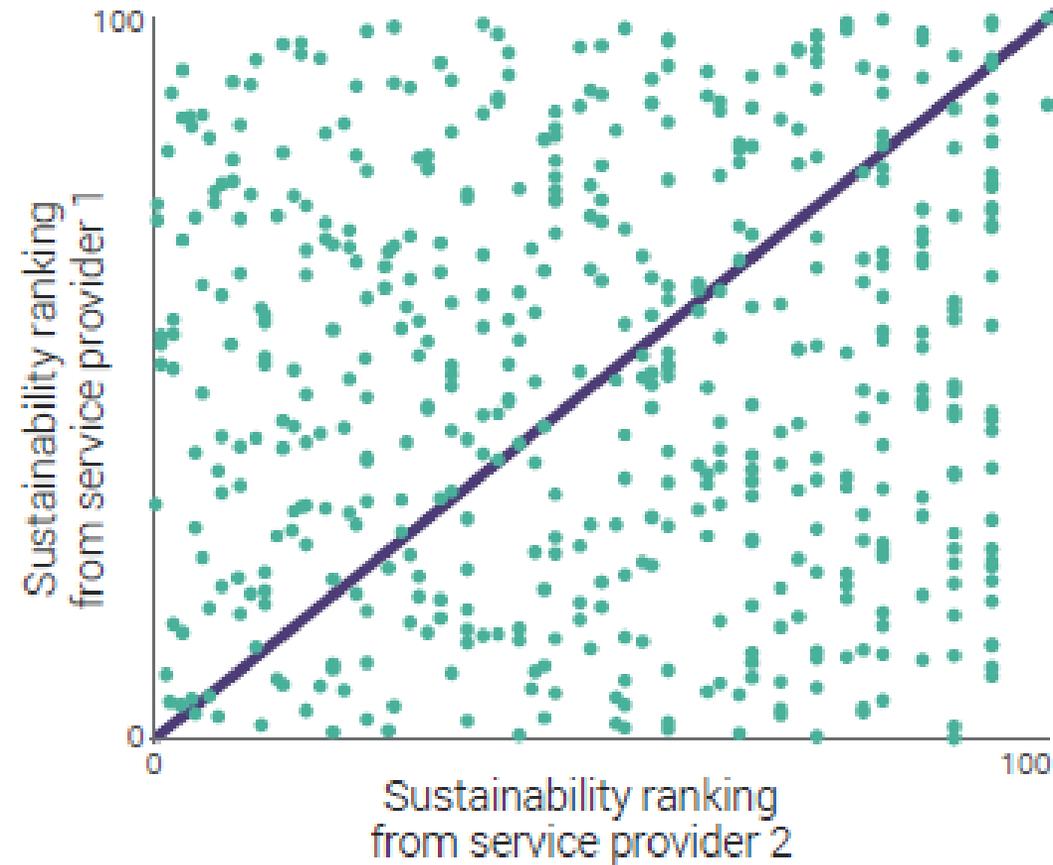
Experts deem the CDP, Dow Jones Sustainability Index and Access to Medicines Index as the three most credible ratings.



■ Credible (4+5)
 ■ Not credible (1+2)

ESG Divergence

Line representing perfect alignment of sustainability ranking



ESG divergence

MIT Aggregate Confusion Project

“This paper investigates why sustainability ratings diverge. In the absence of a reliable measure of “true ESG performance,” the next best thing is to understand what drives the differences of existing ESG ratings. In principle, there are two reasons why ratings diverge. They might diverge because rating agencies adopt different definitions of ESG performance, or they can differ because these agencies adopt different approaches to measuring ESG performance.”

- Scope divergence
- Weight divergence
- Aggregation divergence
- Measurement divergence

Source: Berg, et al 2019 Aggregate Confusion. MIT working paper.

ESG Divergence

MIT Aggregate Confusion Project

KLD clearly exhibits the lowest correlations with all other raters, both for the ESG rating and for the individual dimensions. RobecoSAM and Vigeo-Eiris have the highest level of agreement between each other, with a correlation of 0.73.

Table 2. Correlation at aggregate ESG level and at E, S, and G level.

	SA - VI	SA - KL	SA - RS	SA - A4	VI - KL	VI - RS	VI - A4	KL - RS	KL - A4	RS - A4
ESG	0.73	0.53	0.68	0.67	0.48	0.71	0.71	0.49	0.42	0.64
E	0.70	0.61	0.66	0.65	0.55	0.74	0.66	0.58	0.55	0.70
S	0.61	0.28	0.55	0.58	0.33	0.70	0.68	0.24	0.24	0.66
G	0.55	0.08	0.53	0.51	0.04	0.78	0.77	0.24	-0.01	0.81
Econ	-	-	-	-	-	-	-	-	-	0.43

Correlations between the ratings on the aggregate level (E, S, G, and ESG) from the five different rating agencies are calculated using the common sample. The results are similar using pairwise common samples based on the full sample. SA, RS, VI, A4 and KL are short for Sustainalytics, RobecoSAM, Vigeo-Eiris, Asset4, and KLD, respectively.

- Find that the correlations between the ratings of 5 different raters examined are on average 0.61, and range from 0.42 to 0.73.
- Comparison: credit ratings from Moody's and Standard & Poor's are correlated at 0.994.

ESG Divergence

MIT Aggregate Confusion Project

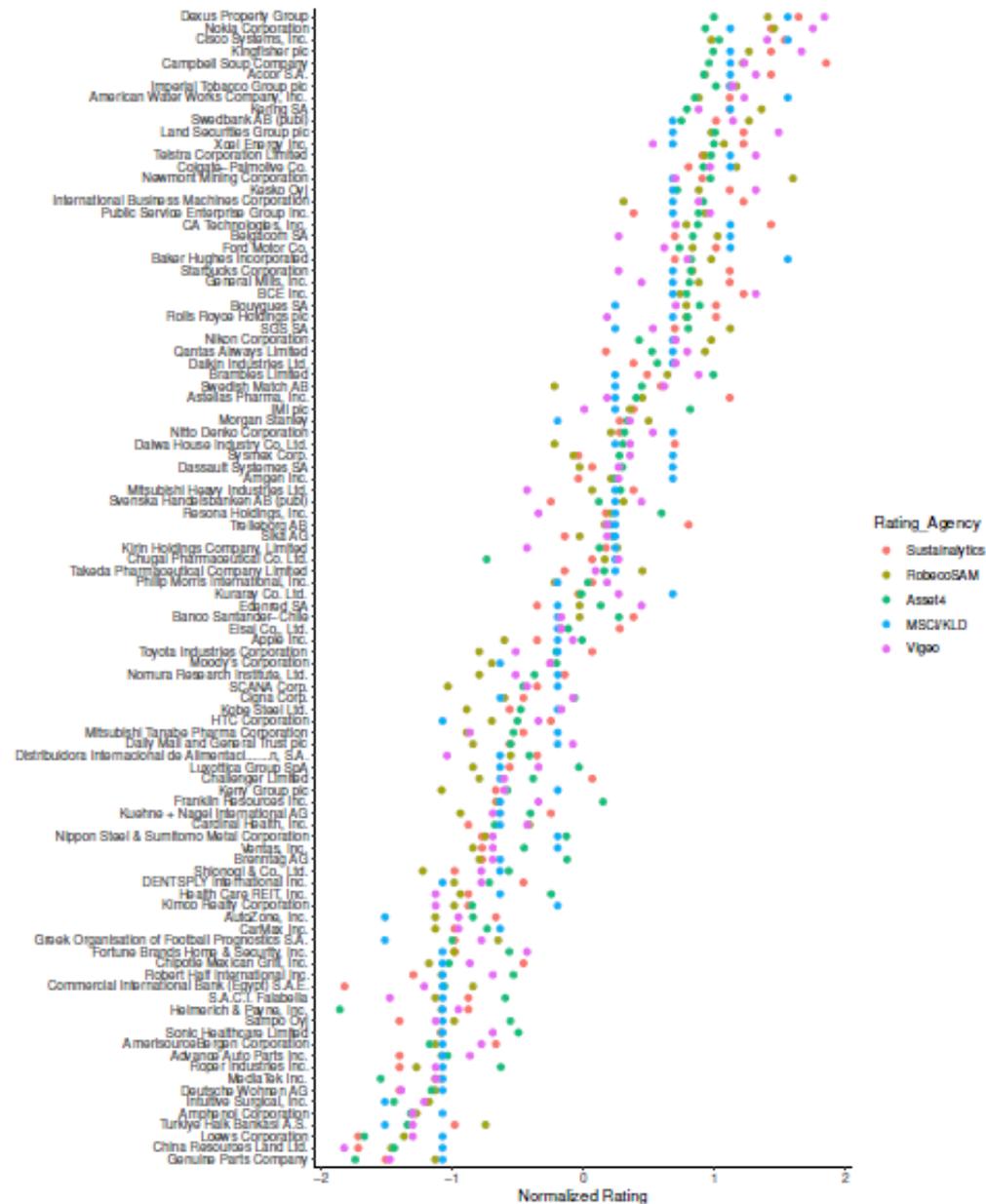


Figure 1. Comparison of firms' normalized scores for different rating agencies.

100 firms with the lowest median average distance within the normalized common sample (n=823). Firms are sorted by their median rating. Each rating agency is plotted in a different color. The vertical strings of blue dots are due to the fact that the KLD rating has only 14 unique values.

ESG Divergence

MIT Aggregate Confusion Project



Figure 2. Comparison of firms' normalized scores for different rating agencies.

100 firms with the highest median average distance within the common sample (n=823). Firms within these group have been sorted by their respective median. Each rating agency ranking is plotted in a different color.

ESG Divergence

MIT Aggregate Confusion Project

Table 4. Number of indicators per Categories.

	KLD	Vigeo-Eiris	RobecoSAM	Sustainalytics	Asset4
Access to Basic Services	1	0	0	2	1
Access to Healthcare	1	0	3	6	1
Animal Welfare	0	0	0	2	1
Anti-Competitive Practices	1	1	0	0	2
Audit	0	1	0	4	7
Biodiversity	2	1	1	1	3
Board	0	1	0	6	26
Board Diversity	1	0	0	1	0
Board Gender Diversity	2	0	0	1	0
Business Ethics	1	0	2	4	1
Chairman Ceo Separation	0	0	0	1	1
Child Labor	1	1	0	0	1
Climate Risk Mgmt.	2	0	2	0	1
Clinical Trials	0	0	0	1	1
Collective Bargaining	0	1	0	2	1
Community and Society	1	1	6	3	10
Corruption	1	1	0	2	1
Customer Relationship	2	1	1	1	7
Discrimination and Diversity	3	1	0	2	9
ESG incentives	0	0	1	1	0
Electromagnetic Fields	0	0	1	1	0
Employee Development	3	1	2	1	13
Employee Turnover	0	0	0	1	1
Energy	1	1	6	3	5
Environmental Fines	1	0	0	1	1
Environmental Mgmt. System	1	0	0	2	1
Environmental Policy	0	2	3	4	4
Environmental Reporting	0	0	1	2	1
Financial Inclusion	1	0	0	1	0
Forests	0	0	1	1	0
GHG Emissions	1	1	0	5	5
GHG Policies	0	0	2	3	4
GMOs	0	0	1	1	1
Global Compact Membership	0	0	0	1	1
Green Buildings	1	0	2	5	1
Green Products	1	1	1	7	20
HIV Programmes	0	0	0	1	1
Hazardous Waste	0	0	1	1	1
Health and Safety	2	1	1	7	7
Human Rights	5	1	1	2	5
Indigenous Rights	1	0	0	1	1
Labor Practices	3	4	1	3	16

ESG Divergence

MIT Aggregate Confusion Project

Table 5. Correlation between rating agencies at the level of categories.

	KL:A4	KL:RS	KL:SA	KL:VI	RS:A4	RS:SA	SA:A4	VI:A4	VI:RS	VI:SA	Average
Access to Basic Services	0.34		0.42				0.48				0.41
Access to Healthcare	0.52	0.53	0.59		0.55	0.65	0.65				0.58
Animal Welfare							0.61				0.61
Anti-Competitive Practices	0.55			-0.04				-0.05			0.15
Audit							0.64	0.57		0.55	0.58
Biodiversity	0.03	0.00		0.04	0.47			0.41	0.67		0.27
Board							0.51	0.59		0.38	0.49
Business Ethics	0.34	-0.07	0.05		-0.11	0.34	-0.03				0.09
Chairman Ceo Separation							0.56				0.56
Child Labor	0.49										0.49
Climate Risk Mgmt.	0.44	0.45			0.56						0.48
Clinical Trials							0.60				0.60
Collective Bargaining							-0.05	0.00		0.51	0.16
Community and Society	0.20	0.21	-0.24	0.28	0.58	-0.15	-0.01	0.50	0.50	-0.07	0.18
Corruption	-0.13		0.27	0.30			-0.18	-0.16		0.56	0.11
Customer Relationship	-0.04	-0.08	0.27	-0.08	0.46	-0.17	-0.15	0.52	0.50	-0.08	0.12
Discrimination and Diversity	0.00		-0.04	-0.03			0.61	0.62		0.63	0.30
Electromagnetic Fields						0.49					0.49
Employee Development	0.34	0.32	0.00	0.29	0.57	0.18	0.32	0.29	0.38	0.19	0.29
Employee Turnover							0.40				0.40
Energy	0.27	0.31	0.12	0.24	0.22	0.26	0.30	0.45	0.37	0.38	0.29
Environmental Fines							0.17				0.17
Environmental Mgmt. System	-0.07		0.63				0.41				0.32
Environmental Policy					0.63	0.50	0.52	0.62	0.63	0.52	0.57
Environmental Reporting					0.39	0.52	0.25				0.39
Financial Inclusion			0.29								0.29
Forests											
GHG Emissions	-0.17		-0.11	-0.05			0.35	0.48		0.30	0.13
GHG Policies					0.41	0.28	0.68				0.45
GMOs					0.19	0.44	0.41				0.35
Global Compact Membership							0.86				0.86
Green Buildings	0.22	0.48	0.56		0.08	0.39	0.21				0.32
Green Products	0.38	0.28	0.26	0.13	0.56	0.40	0.52	0.35	0.38	0.46	0.37
HIV Programmes							0.73				0.73
Hazardous Waste						0.20	0.09				0.15
Health and Safety	0.28	0.24	0.04	0.30	0.58	-0.15	-0.17	0.71	0.63	-0.14	0.23
Human Rights	0.11		-0.10	0.13			0.05	0.46		0.01	0.11
Indigenous Rights	-0.10		0.35				-0.27				-0.01
Labor Practices	0.05	-0.13	0.13	-0.03	0.38	0.18	0.34	0.48	0.55	0.19	0.21
Lobbying										-0.28	-0.28
Non-GHG Air emissions							0.42				0.42
Ozone Depleting Gases							0.62				0.62
Packaging											
Philanthropy					0.26	0.39	0.43	0.28	0.42	0.43	0.37
Privacy and IT		0.32	0.36			0.27					0.32
Product Safety	0.02	0.19	0.02	0.05	0.37	-0.10	-0.05	0.25	0.49	-0.09	0.11
Public Health		0.49	0.46			0.47					0.47
Remuneration	0.13	0.00	0.14	0.08	0.29	0.17	0.81	0.73	0.19	0.69	0.32
Reporting Quality							0.51				0.51
Resource Efficiency					0.59	0.33	0.34				0.42
Responsible Marketing	0.20	-0.34	-0.47	-0.08	-0.11	0.60	-0.07	0.00	0.43	0.40	0.06

The Social Origins of ESG

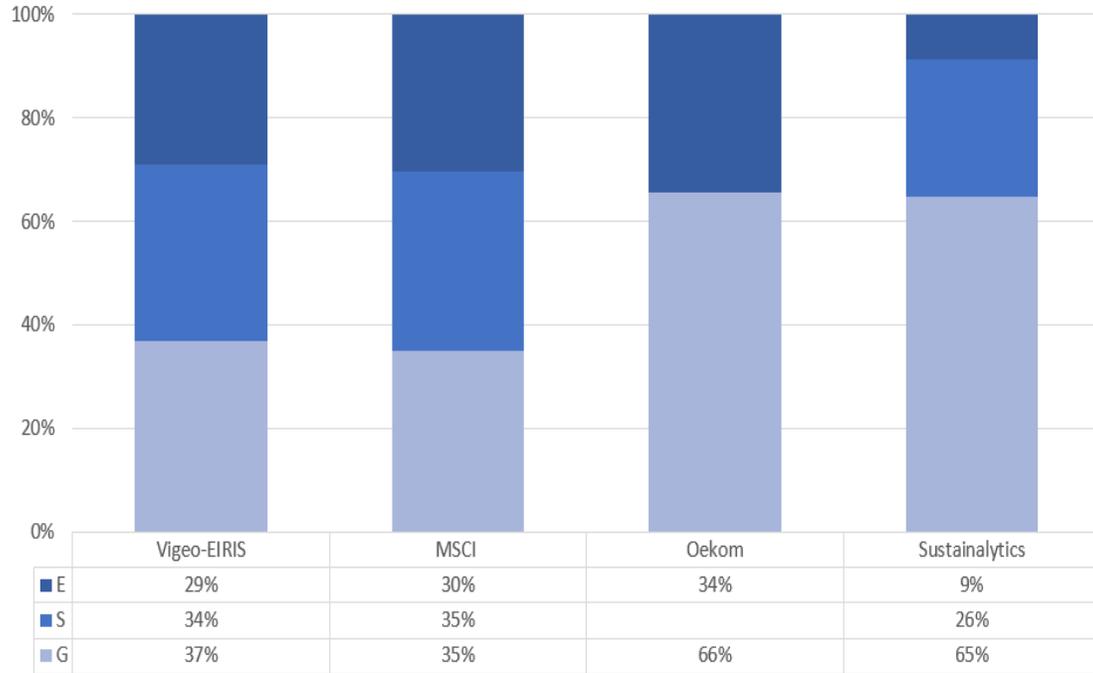
The way ESG is constructed depends on:

- The organizational origins
- Market developments
- Conviction of leaders and founders
- Organizational history (M&As, etc.)



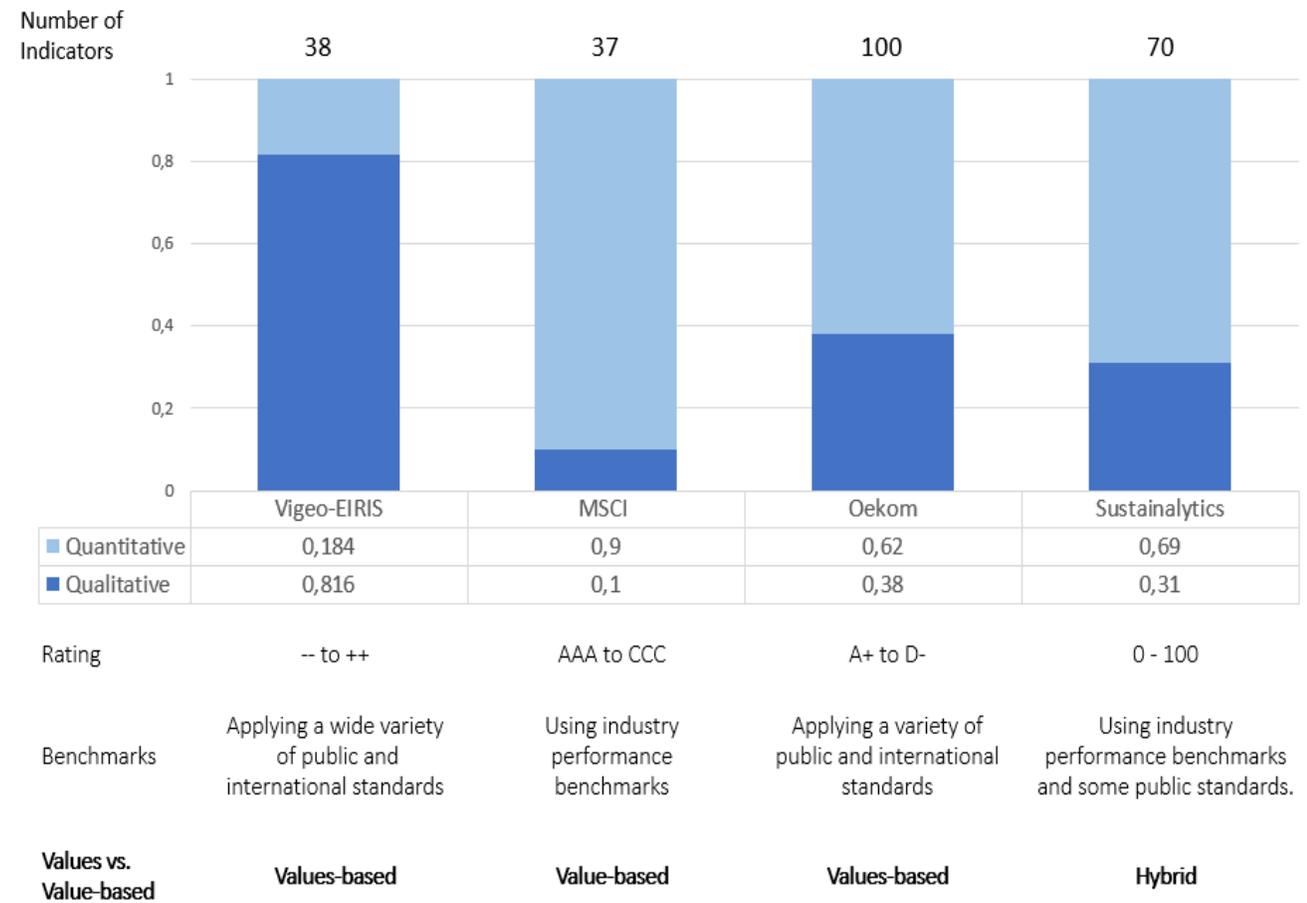
- **The Conceptualization of Sustainability**
 - Normative vs. Risk-focussed
- **The Definition of Materiality**
 - Materiality of impact
 - Materiality to business

Values-driven vs. Value-driven logic in data creation can lead to divergence



Divergence in “what is ESG”

Divergence in “how to capture ESG”



ESG data creation 2.0



Collects on-the-ground sensor and asset class data, provides blockchain enabled platform solutions and data visualization.



Automation of sustainability reporting, takes into account frameworks such as GRI, CDP, etc. when crawling Books and ERP systems.



Matches web-scraped impact data to SDG indicators.



Creation of asset-level data that relies on geo-spatial, satellite data.



Assessment of financial portfolio alignment with climate scenarios.



AI and machine learning of big data from online sources to capture “ESG exposure” scores.

Common Tools:

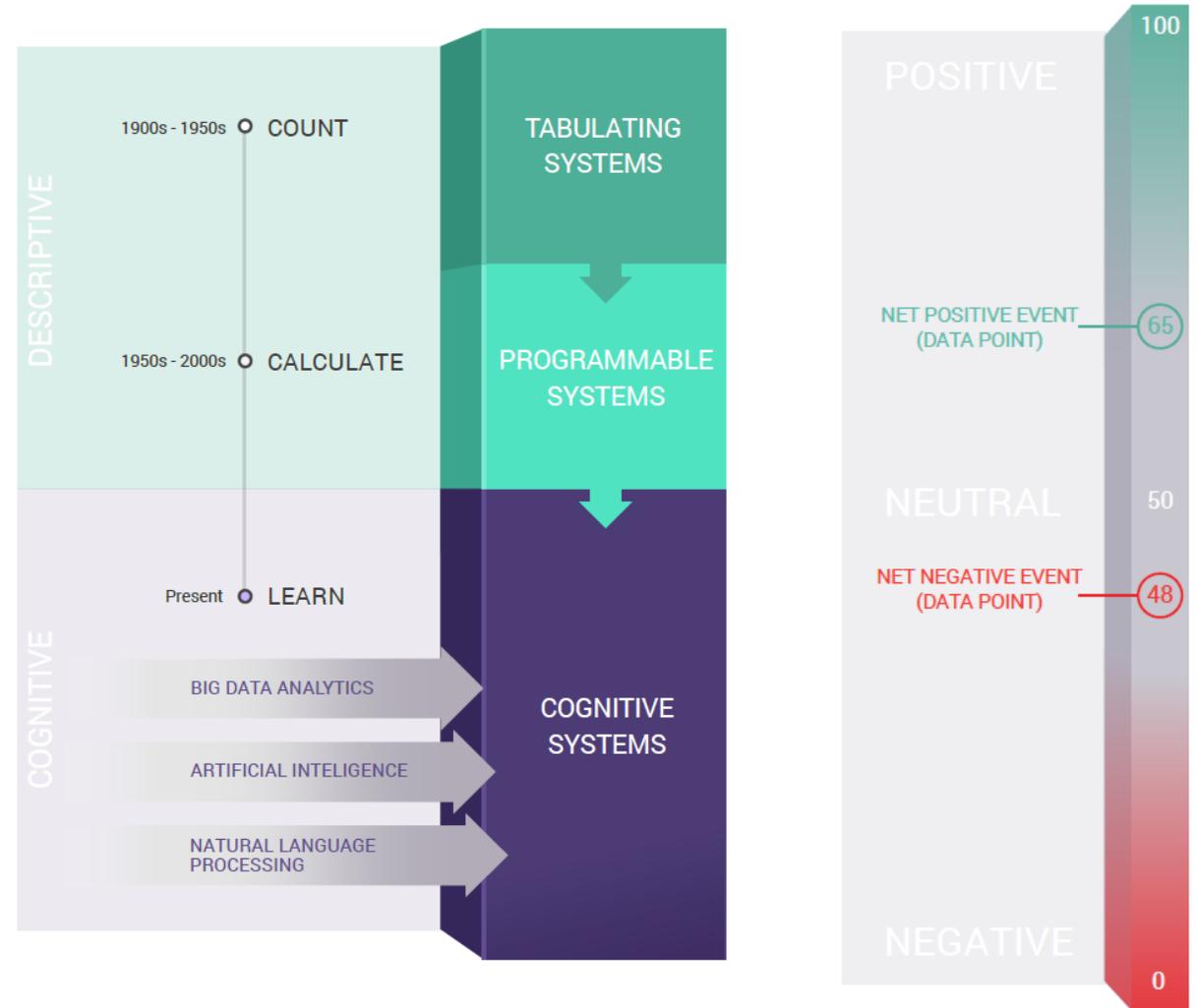
- Geo-spatial data
- Sensor data systems
- Web-scraping
- Book and ERP analysis
- Machine learning
- Etc.

ESG data 2.0

Product: Insight 360°

- Artificial intelligence and machine learning
- Natural language processing
- Big data analytics

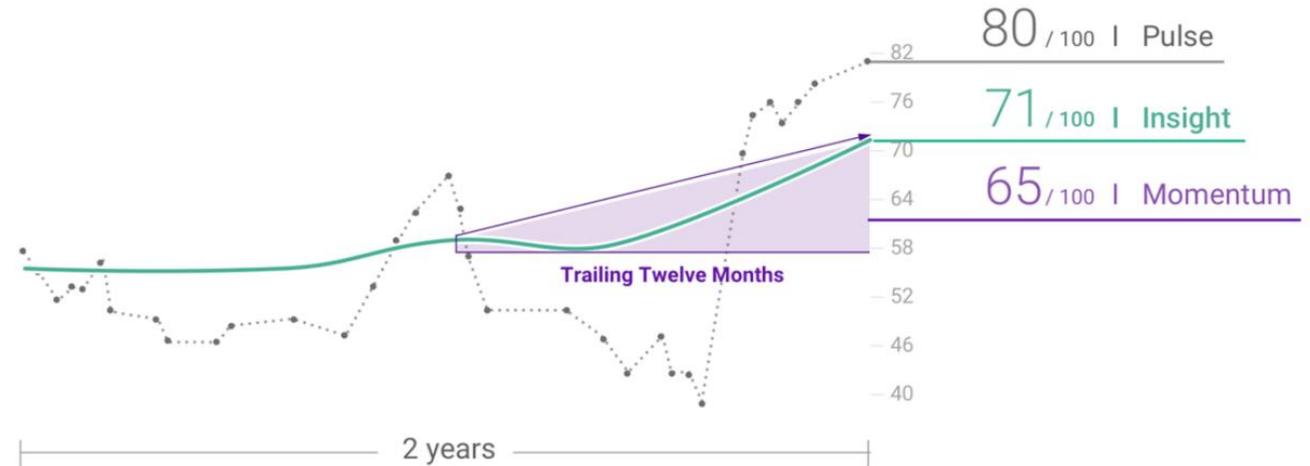
uses artificial intelligence to provide continuously updated, material data and scores for 8,000+ publicly traded companies worldwide.



ESG data creation 2.0

Data structure

- **Pulse Score**
 - Short-term performance
 - Focuses on events of the day
- **Insight Score**
 - Long-term performance
 - Derived from the Pulse score using an exponentially weighted moving average, with a 6-month half-life to smooth out the Pulse score
- **Momentum Score**
 - Measures the trend of a company
 - Derived from the Insight Score, measures the slope or trajectory over a trailing 12-month (TTM) time period
- **Volume** – Number of events/articles per day/month per company





“Whether we entrust our decisions to machines of metal, or to those machines of flesh and blood which are ... corporations, we shall never receive the right answers ... unless we ask the right questions.”

— Norbert Wiener, *The Human Use of Human Beings* (1950)

**Technology can be an opportunity,
but also a challenge.**

**Technology does NOT relieve us of our
responsibility to make sensible decisions.**

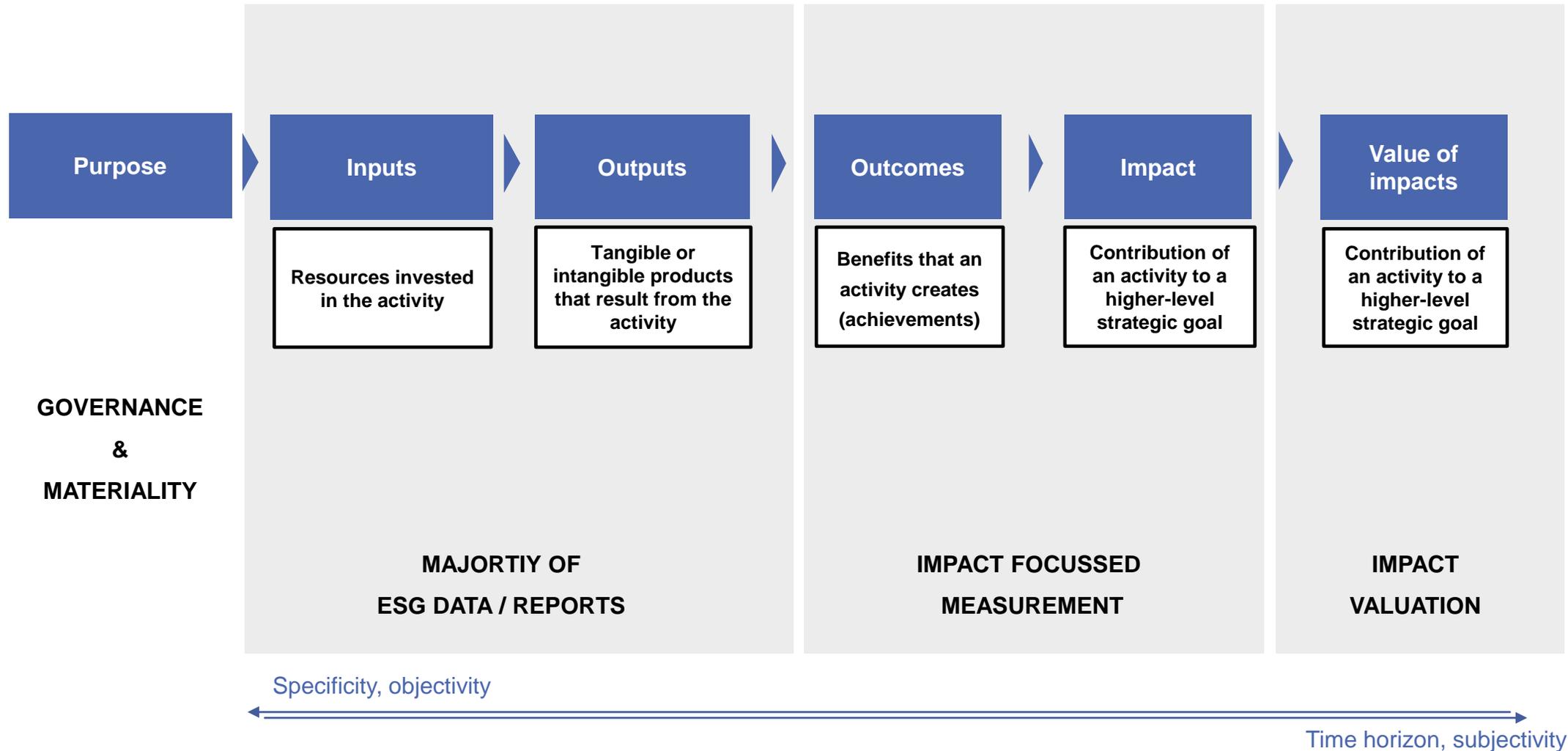
EQUITY RESEARCH: REPORTING FRAMEWORKS

DR JUDITH STROEHLE



ESG Investing

ESG and IMPACT



ESG and IMPACT

ASSESSMENT MEASURES	WASTEWATER TREATMENT	RENEWABLE ENERGY	PHARMACEUTICALS
<p>Impact metrics</p> <p><i>Data source: Combined business activity/technology/sociobiogeophysical impact metrics, as proposed here</i></p>	<p>Outputs: Volumes of wastewater treated (e.g., cubic meters per day)</p> <p>Outcomes: Pollutant concentration reductions in receiving waters (e.g., milligrams per liter)</p> <p>Impacts: Beneficiary populations drawing drinking water from downstream (1000s), stream length of improved fish habitat (kilometers below threshold)</p>	<p>Outputs: Emissions reduced (CO₂, PM_{2.5}, SO₂, NO_x) (e.g., metric tons per year)</p> <p>Outcomes: Ambient air pollution improvement (e.g., parts per million; number of smog alerts)</p> <p>Impacts: Lives extended, hospitalizations and sick days avoided, reduced health-care spending</p>	<p>Outputs: Spatially distributed drug sales</p> <p>Outcomes: Target populations reached (e.g., millions; % of total)</p> <p>Impacts: Lives extended, hospitalizations and sick days avoided, reduced health-care spending</p>
<p>Financial (standards-based)</p> <p><i>Data source: Mandated corporate financial statements</i></p>	<p>Valuation</p> <p>Corporate strategy and relative competitive position</p>		
<p>Environmental, social, and governmental norms (nonfinancial performance)</p> <p><i>Data source: Voluntary or mandated corporate self-disclosure, sustainability reports</i></p>	<p>Facility worker health and safety</p> <p>Environmental compliance</p> <p>Governance and ethical policies</p>		

Frameworks for Reporting and Measurement

1. Principles of Practice



- Outline principles for acceptable / desirable and unacceptable / undesirable behaviour.
- Other prerogatives than reporting: membership, policy advocacy, development work, etc.
- Important “first instances” of reference, usually with high agreement from all parties.

1. Principles of Practice



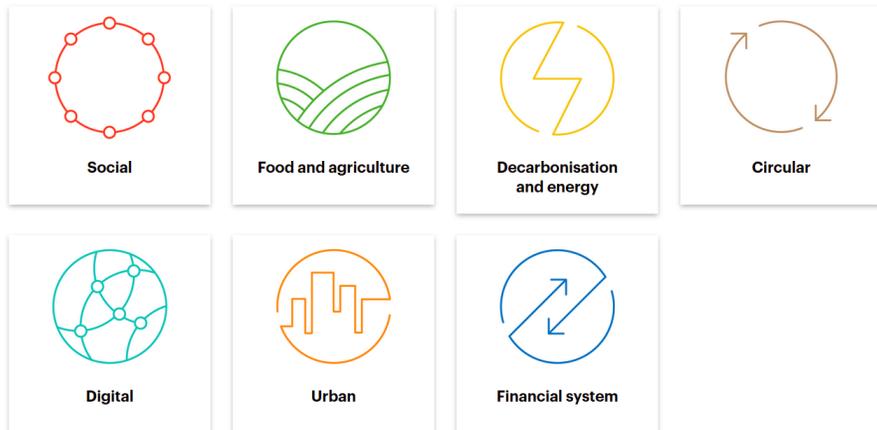
THE SDG INDUSTRY MATRIX

<https://www.unglobalcompact.org/library/3111>

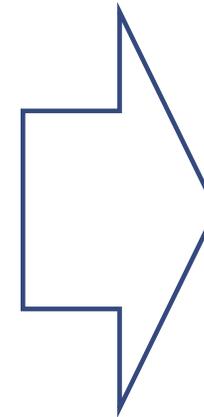
United Nations Global Compact & KPMG



**World
Benchmarking
Alliance**



Benchmarking the 2000 firms with the highest systemic impact on the SDGs through the examination of seven necessary systems transformations.



Systems Thinking

<https://www.worldbenchmarkingalliance.org/>



United Nations
Global Compact

Human Rights

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

Labour

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

Environment

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

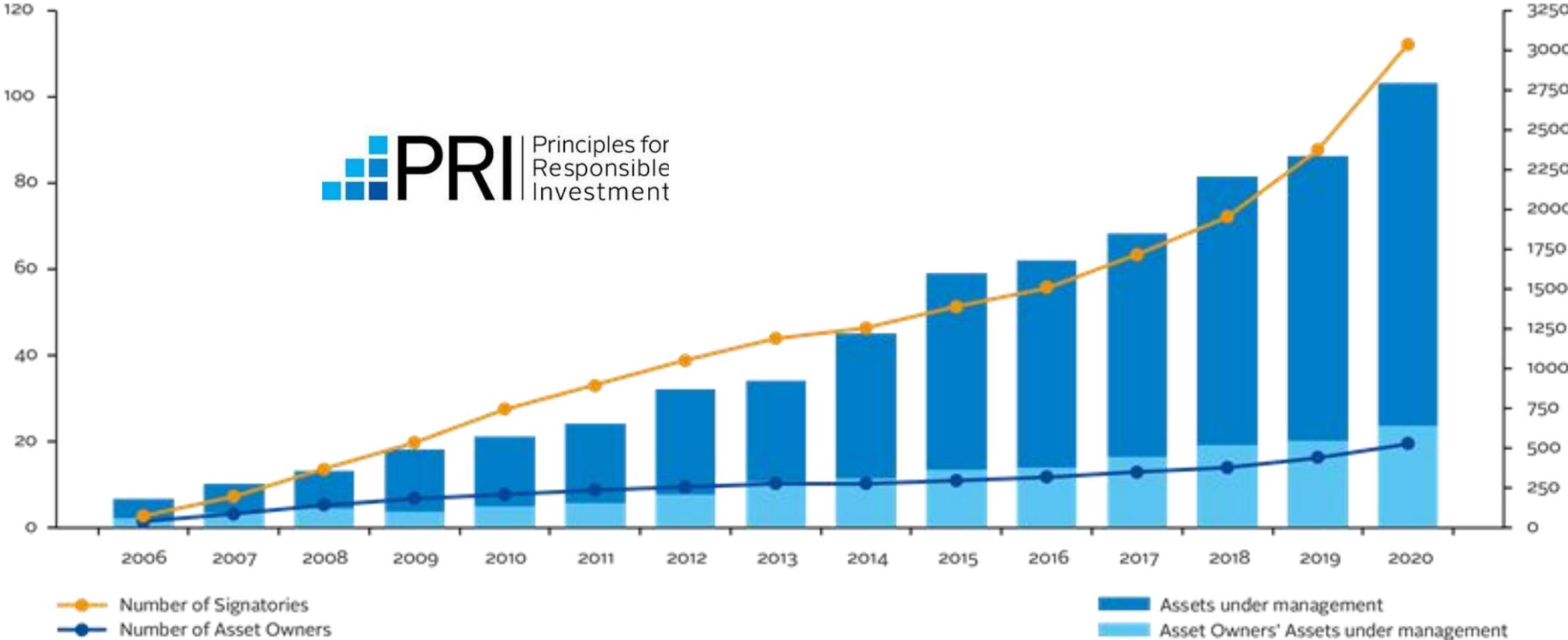
Anti-Corruption

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

What are the behaviours of a sustainable investor?

Assets under management (US\$ trillion)

N° Signatories



- **Principle 1:** We will incorporate ESG issues into investment analysis and decision-making processes.
- **Principle 2:** We will be active owners and incorporate ESG issues into our ownership policies and practices.
- **Principle 3:** We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- **Principle 4:** We will promote acceptance and implementation of the Principles within the investment industry.
- **Principle 5:** We will work together to enhance our effectiveness in implementing the Principles.
- **Principle 6:** We will each report on our activities and progress towards implementing the Principles.

The Principles for Responsible Banking

are a unique framework for ensuring that signatory banks' strategy and practice align with the vision society has set out for its future in the [Sustainable Development Goals](#) and the [Paris Climate Agreement](#).

- 230 banks
 - Representing more than a third of the global banking industry
 - Implementation at strategic, portfolio and transaction level
-
- Guidance on Biodiversity Target-setting
 - Net-Zero Banking Alliance
 - Guidance on Financial Inclusion and Financial Health
 - UNEP FI TCFD Banking Pilot Projects

Frameworks for Reporting and Measurement

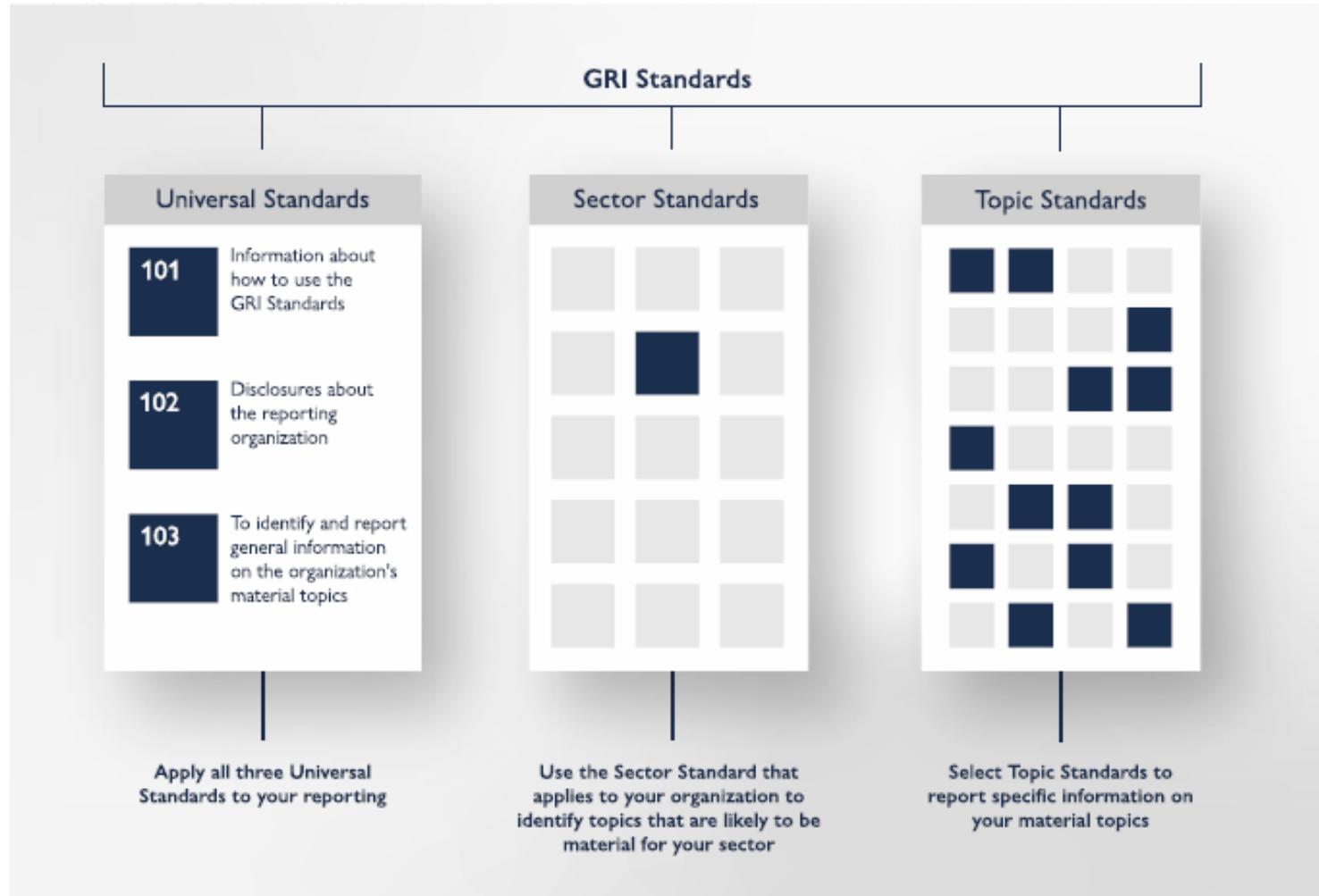




Frameworks of Reporting



Frameworks of Reporting



Overview of principles

- Accuracy
- Balance
- Clarity
- Comparability
- Completeness
- Sustainability context
- Timeliness
- Verifiability

Metrics & Measures

GRI 409: Forced or Compulsory Labor

1. Management approach disclosures

Management approach disclosures are a narrative explanation of how an organization manages a material topic, the associated impacts, and stakeholders' reasonable expectations and interests. Any organization that claims its report has been prepared in accordance with the GRI Standards is required to report on its management approach for every material topic, as well as reporting topic-specific disclosures for those topics.

Therefore, this topic-specific Standard is designed to be used together with *GRI 103: Management Approach* in order to provide full disclosure of the organization's impacts. *GRI 103* specifies how to report on the management approach and what information to provide.

Reporting requirements

- 1.1 The reporting organization shall report its management approach for forced or compulsory labor using *GRI 103: Management Approach*.

2. Topic-specific disclosures

Disclosure 409-1

Operations and suppliers at significant risk for incidents of forced or compulsory labor

Reporting requirements

The reporting organization shall report the following information:

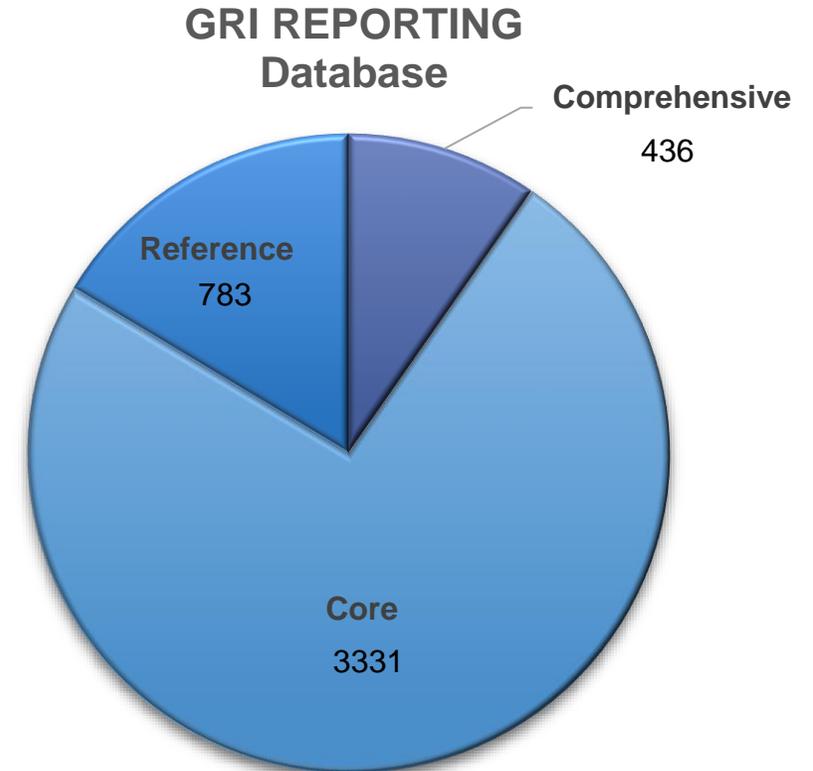
- a. Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor either in terms of:
 - i. type of operation (such as manufacturing plant) and supplier;
 - ii. countries or geographic areas with operations and suppliers considered at risk.
- b. Measures taken by the organization in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labor.

Disclosure
409-1

Frameworks of Reporting

The importance of GRI

- Relevance through usage:**
 According to the GRI database, about 75% of the largest 250 companies worldwide, and about 80% of companies in the Dow Jones Industrial Average make use of GRI standards in their sustainability disclosures.
- Regulatory Relevance:**
 Around the world, more than 160 policies in over 60 countries reference GRI for reporting, some require it:
 - The European Union NFR Directive 2014/95/EU recommends the use of GRI
 - GRI is mentioned in a total of 38 national and regional jurisdictions, recommended in 23 jurisdictions and required for certain types of companies (usually state-owned, listed in Taiwan) in 6 jurisdictions.





SASB Foundation Board of Directors

17 members from the industry, policy, investment community and civil society.

SASB Standards Board

11 distinguished members from the industry and investment community.

SASB Standards Board Sector Committees

For each of the 11 sectors there are 3 board members plus one staff member assigned to review and discuss the sector



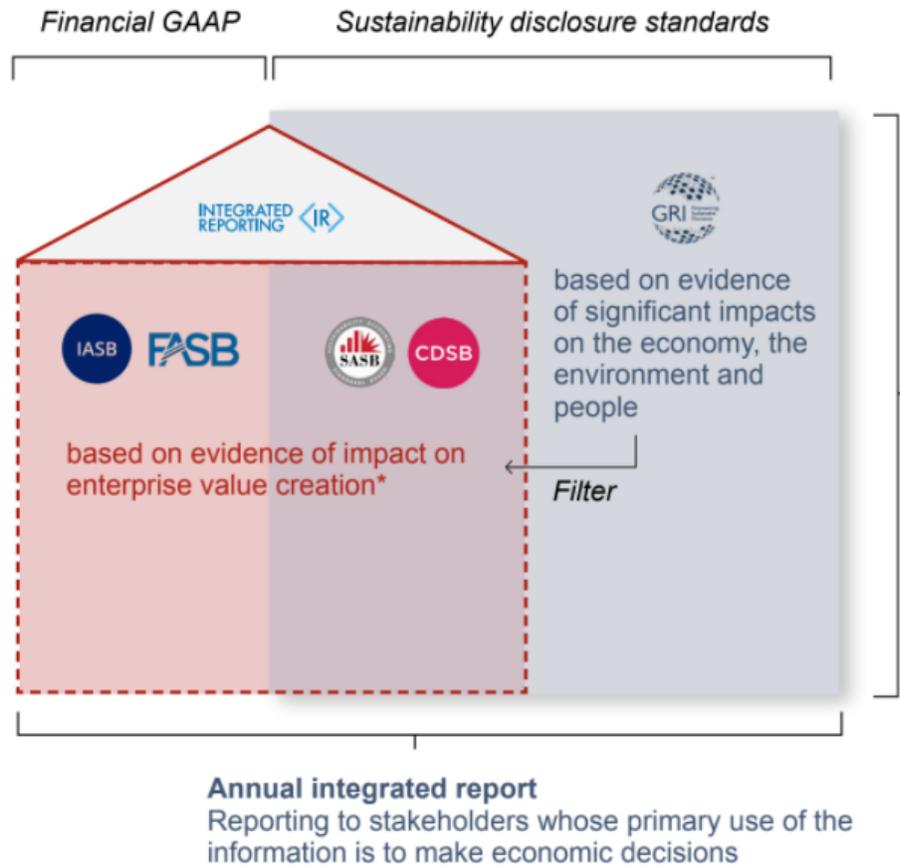
Similar processes, but distinct objectives, evidence and input lead to different measurement recommendations

	EVIDENCE	GOVERNANCE	STANDARDS DEVELOPMENT	DUE PROCESS
Sustainability issues	GRI Focus on evidence that disclosure is in the public interest	GSSB: 15 members across 5 constituencies of business enterprises, civil society organisations, investment institutions, labor and mediating institutions	Global groups of subject matter experts across the 5 constituencies	Governance oversight of due process Evidence vetting Standards Board review Public exposure Exposure drafts
	SASB Focus on evidence of impact on revenues expense, valuation of assets/liabilities, cash flows, or cost of capital of an entity	SASB Standards Board: 9 members from academics, investors, companies, legal, risk, and auditing	Global industry specific experts primarily from issuers and investors	Finalisation Revision and board approval Standards released

September 2020

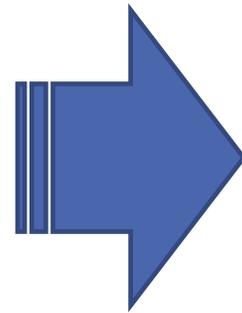


Statement of Intent to Work Together Towards Comprehensive Corporate Reporting

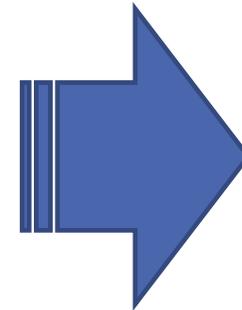


Sustainability reporting through various communication channels about the economic, environmental and social impacts caused by the organisation to meet the information needs of a diverse group of stakeholders

* Comprehensive value creation would also need to include manufactured and intellectual capital



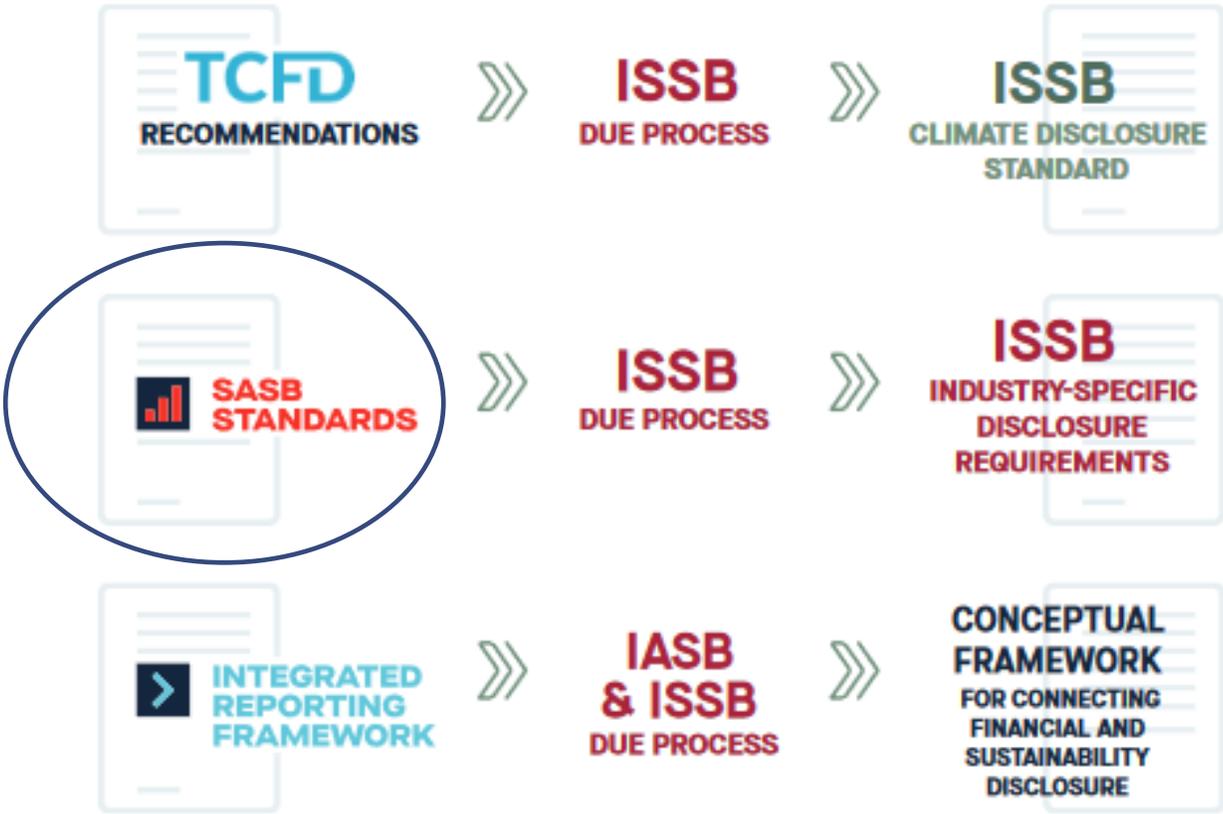
**Value
Reporting
Foundation**



Climate
Disclosure
Standards
Board



Streamlining disclosure



Source: <https://www.sasb.org/wp-content/uploads/2022/03/SASBStandardsandIFRSF-030222.pdf>

Metrics & Measures

Environment

- GHG Emissions
- Air Quality
- Energy Management
- Water & Wastewater Management
- Waste & Hazardous Materials Management
- Ecological Impacts

Leadership & Governance

- Business Ethics
- Competitive Behavior
- Management of the Legal & Regulatory Environment
- Critical Incident Risk Management
- Systemic Risk Management



Business Model & Innovation

- Product Design & Lifecycle Management
- Business Model Resilience
- Supply Chain Management
- Materials Sourcing & Efficiency
- Physical Impacts of Climate Change

Social Capital

- Human Rights & Community Relations
- Customer Privacy
- Data Security
- Access & Affordability
- Product Quality & Safety
- Customer Welfare
- Selling Practices & Product Labeling

Human Capital

- Labor Practices
- Employee Health & Safety
- Employee Engagement, Diversity & Inclusion



APPAREL, ACCESSORIES & FOOTWEAR

Sustainability Accounting Standard

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Management of Chemicals in Products	Discussion of processes to maintain compliance with restricted substances regulations	Discussion and Analysis	n/a	CG-AA-250a.1
	Discussion of processes to assess and manage risks and/or hazards associated with chemicals in products	Discussion and Analysis	n/a	CG-AA-250a.2
Environmental Impacts in the Supply Chain	Percentage of (1) Tier 1 supplier facilities and (2) supplier facilities beyond Tier 1 in compliance with wastewater discharge permits and/or contractual agreement ²	Quantitative	Percentage (%)	CG-AA-430a.1
	Percentage of (1) Tier 1 supplier facilities and (2) supplier facilities beyond Tier 1 that have completed the Sustainable Apparel Coalition's Higg Facility Environmental Module (Higg FEM) assessment or an equivalent environmental data assessment	Quantitative	Percentage (%)	CG-AA-430a.2
Labor Conditions in the Supply Chain	Percentage of (1) Tier 1 supplier facilities and (2) supplier facilities beyond Tier 1 that have been audited to a labor code of conduct, (3) percentage of total audits conducted by a third-party auditor	Quantitative	Percentage (%)	CG-AA-430b.1
	Priority non-conformance rate and associated corrective action rate for suppliers' labor code of conduct audits ³	Quantitative	Rate	CG-AA-430b.2
	Description of the greatest (1) labor and (2) environmental, health, and safety risks in the	Discussion and	n/a	CG-AA-430b.3

Frameworks of Reporting

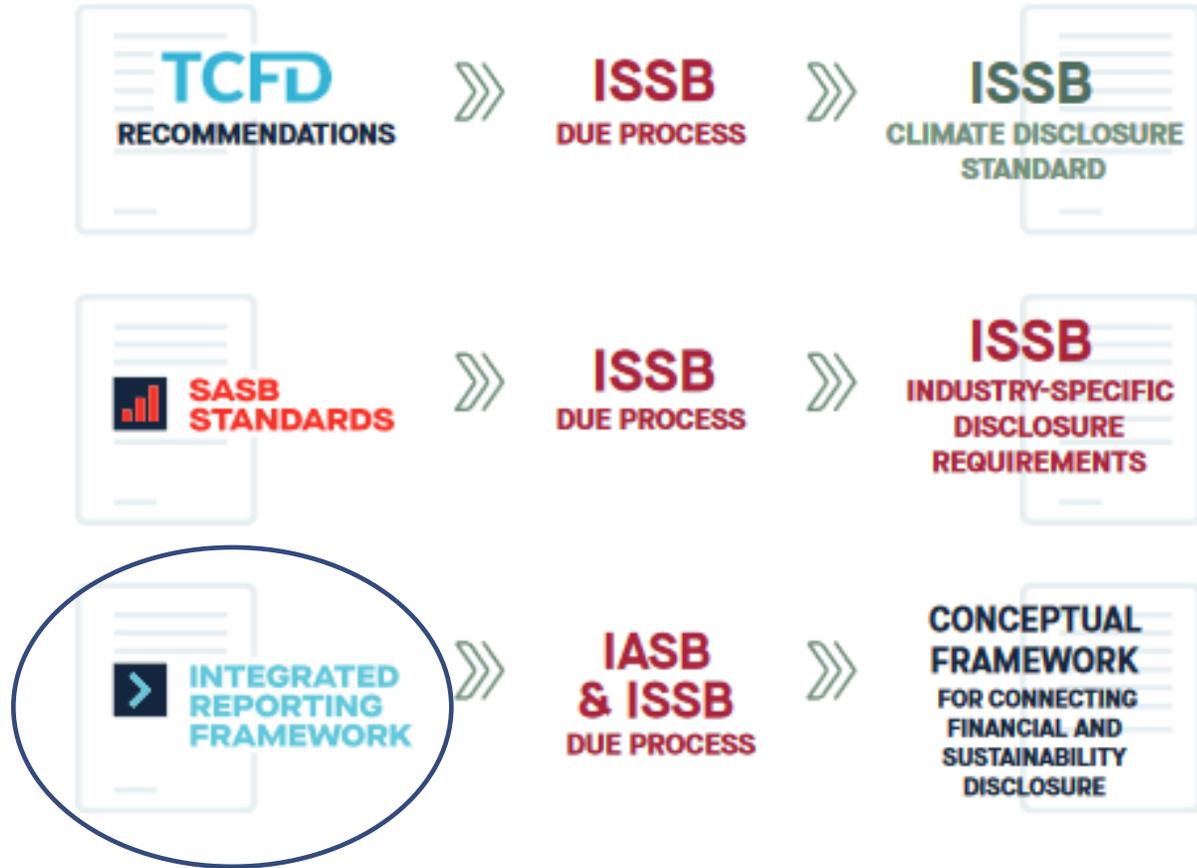
The importance of SASB

- **Relevance of usage (particularly in the US):**
In its 2017 'State of Disclosure' report, SASB reported that about 82.5% of all public American companies included some form of disclosure recommended by SASB, while 42% provided disclosure on specific topics from the SASB conceptual framework
- **Relevance to investors:**
SASB has been repeatedly endorsed by the largest asset managers (e.g. BlackRock's Larry Fink) and is the preferred network for the assessment of financial materiality of sustainability information.





Streamlining disclosure



Source: <https://www.sasb.org/wp-content/uploads/2022/03/SASBStandardsandIFRSF-030222.pdf>

INTEGRATED REPORTING – A CONCEPTUAL FRAMEWORK



“An integrated report is a concise communication about how an organization’s strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value in the short, medium and long term”

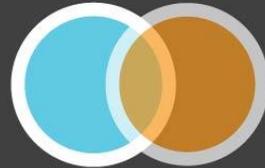


Source: INTEGRATED REPORTING <IR>

INTEGRATED REPORTING – A CONCEPTUAL FRAMEWORK



Financial Reporting



Integrated Reporting



Sustainability Reporting



INTEGRATED REPORTING – CONNECTIVITY



Non-Financial Indicator

Impact on Operating Profit (€ millions, non-IFRS)

Business Health Culture Index

85 to 95 per pp

Employee engagement

50 to 60 per pp

Retention

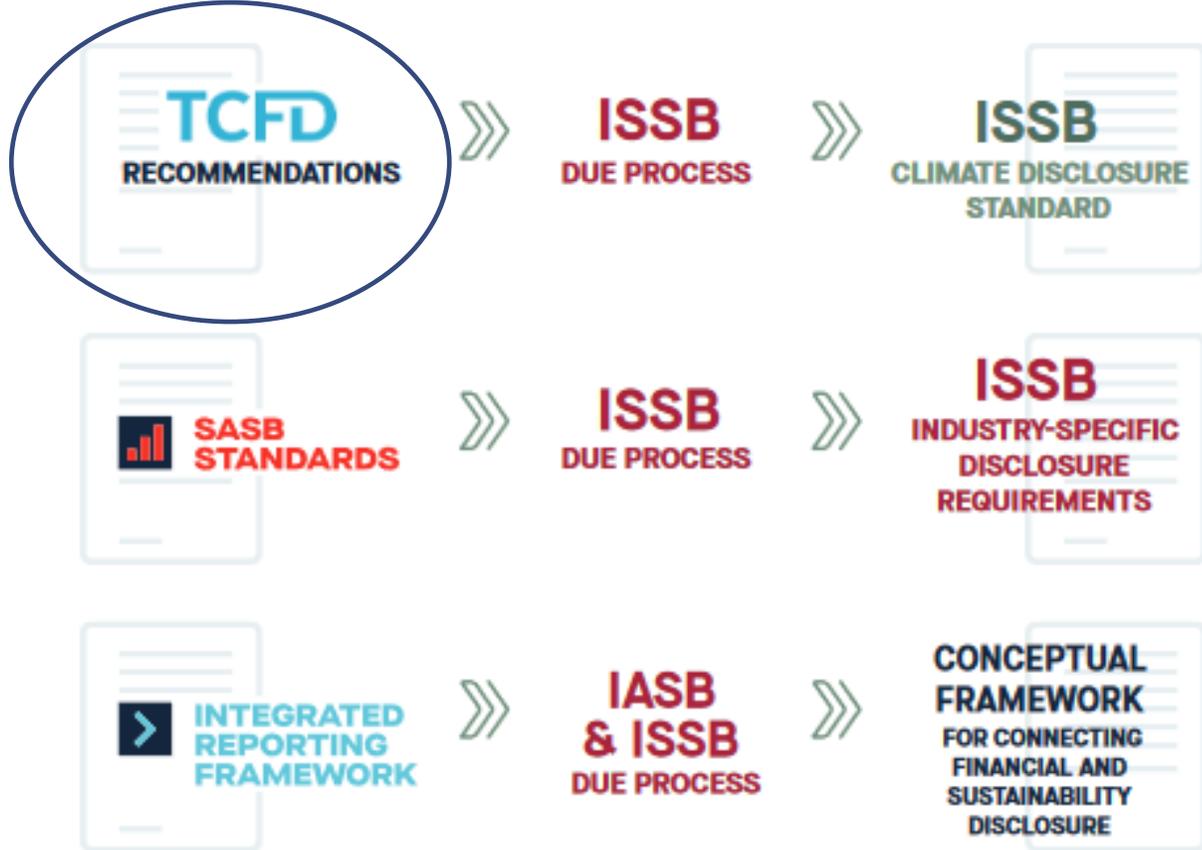
55 to 65 per pp

Carbon emissions

5 per percent



Streamlining disclosure



Source: <https://www.sasb.org/wp-content/uploads/2022/03/SASBStandardsandIFRSF-030222.pdf>

Frameworks for Reporting and Measurement

Climate Reporting

Scenario Analysis



Metrics



Method Guidance

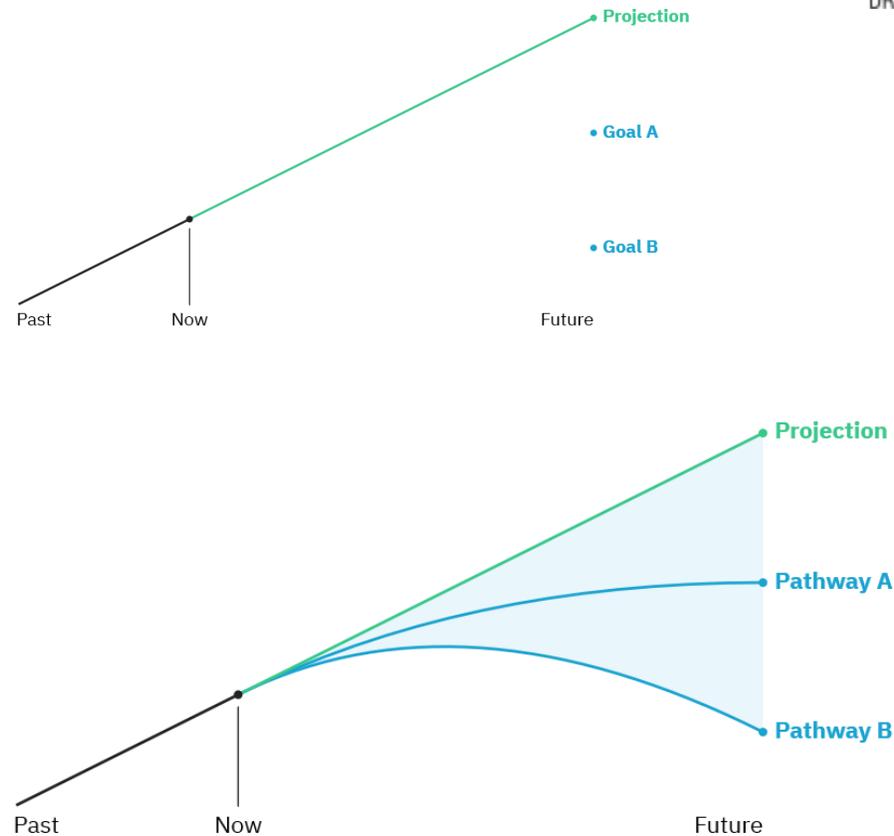


Economist.com

Kal

Scenario Planning

Not predictions, but projections

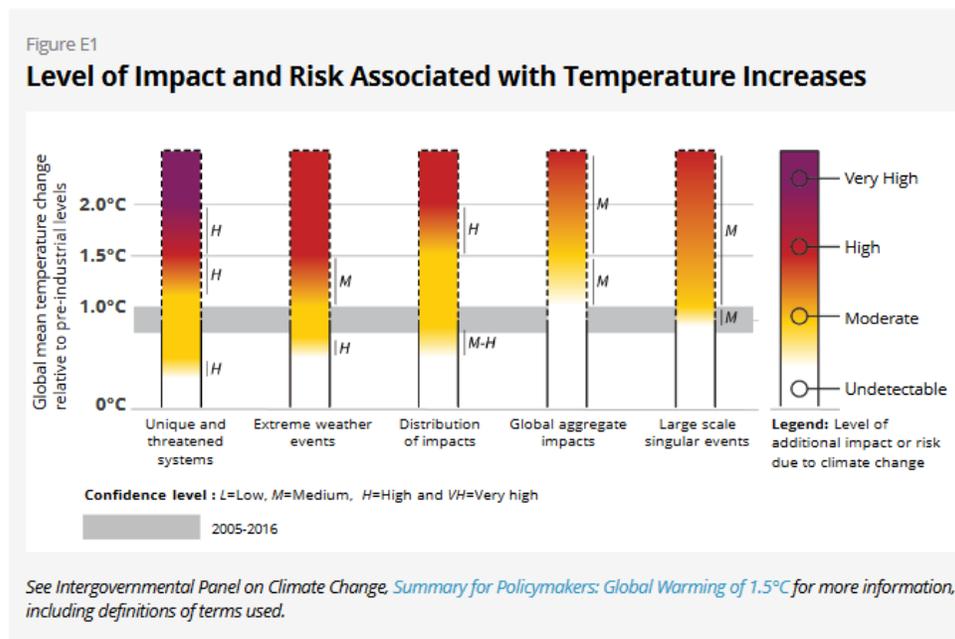


- **Socioeconomic scenarios** that describe the development of societal drivers of human interference with the climate system.
- **Emissions, concentration and climate forcing scenarios** that emerge from these developments.
- **Climate change scenarios** that result from human climate forcing.
- **Climate impact scenarios** as a result of these climate changes.
- **Mitigation scenarios** that limit human-made climate change.
- **Adaptation scenarios** that limit the impact of climate change on societies.
- **Integrated scenarios** that capture several of the above components of future climate change.

TCFD and Scenario Planning

Under the Paris Agreement reached in December 2015, almost 200 countries pledged to control greenhouse gas emissions to limit global warming to 2 degrees Celsius by 2100 from pre-industrial levels, aiming to keep warming at or below 1.5 degrees Celsius.

The [Task Force on Climate-related Financial Disclosures](#) provides a voluntary framework **for companies and investors** to identify and disclose the financial implications of climate risk and opportunity, and emerging policy interventions are beginning to mandate climate risk disclosure.



TCFD reporting

Four Elements of Recommended Climate-Related Financial Disclosures



Governance

The organization's governance around climate-related risks and opportunities

Strategy

The actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy and financial planning

Risk Management

The processes used by the organization to identify, assess and manage climate-related risks

Metrics & Targets

The metrics and targets used to assess and manage relevant climate-related risks and opportunities

Reprinted from "Implementing the Recommendations of the Task Force on Climate-Related Financial Disclosures" (June 2017)

“It is important for organizations to provide an indication of the potential climate-related impact on their assets and liabilities, particularly long-lived assets. This should focus on existing and committed future activities and decisions requiring new investment, restructuring, write-downs, or impairment.”

SESSION II: ESG STANDARDIZATION & REGULATION

DR JUDITH STROEHLE



ESG Investing



A Global Standard?



30 September 2020

IFRS Foundation Trustees consult on global approach to sustainability reporting and on possible Foundation role

02 February 2021

IFRS Foundation Trustees announce next steps in response to broad demand for global sustainability standards



Creation of a new Sustainability Standards Board (SSB) by end of 2021



Maintaining global set of sustainability reporting standards, initially focused on climate risk



Working with established organisations such as TCFD, GRI, SASB, CDSB and CDP.



Achieving a system that can be subject of external assurance.



03 November 2021

IFRS Foundation announces International Sustainability Standards Board, consolidation with CDSB and VRF, and publication of prototype disclosure requirements

Technical Readiness Working Group

- General Requirements for Disclosure of Sustainability-related Financial Information;
- Climate-related Disclosures Prototype;
- Conceptual guidelines for standard setting;
- Architecture of standards;
- Other items to inform a standard-setting agenda;
- Due process characteristics;
- Digitisation strategy; and
- Connectivity between the IASB and the ISSB.

International Sustainability Standards Board



16 December 2021

Emmanuel Faber appointed to lead the International Sustainability Standards Board

31 March 2022

ISSB delivers proposals that create comprehensive global baseline of sustainability disclosures

Structural Development:

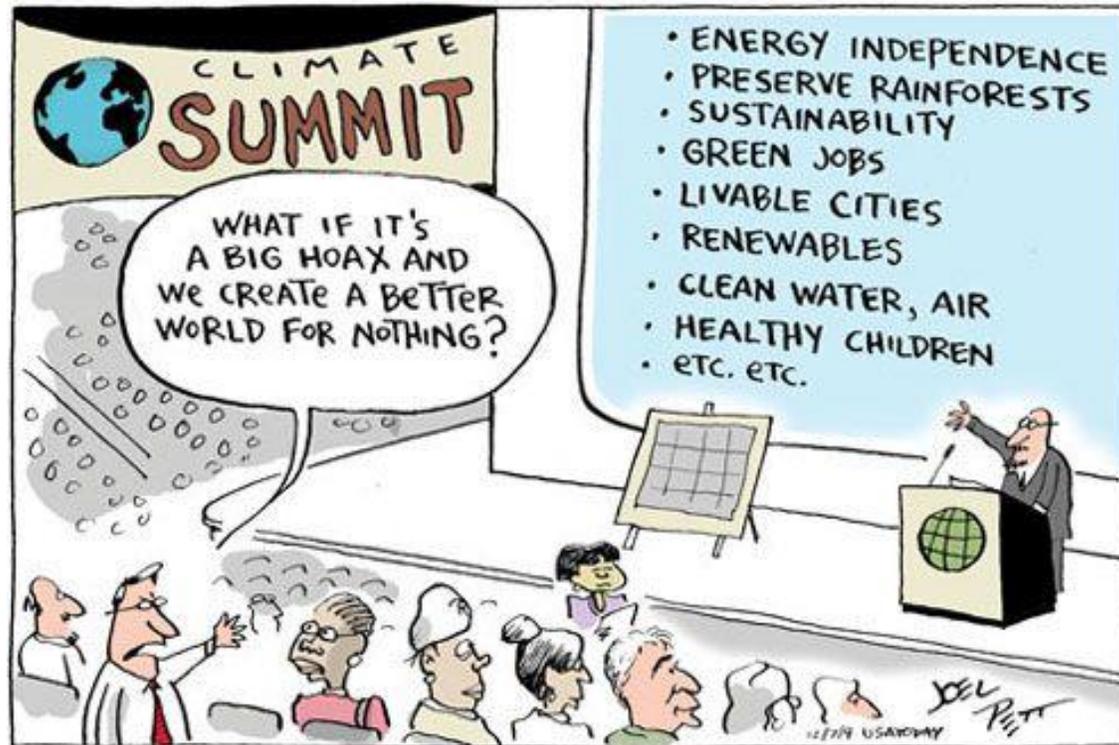
- Will comprise 14 members, some part-time, with equitable regional representation
- Chair: Emmanuel Faber (former CEO of Danone)
- Vice-Chair: Sue Lloyd (former Vice-Chair of IASB); Special Adviser: Janine Guillot (former SASB CEO)

- Headquarter: Frankfurt (global) and Montreal (Americas)
- Likely additional regional offices in San Francisco, London, Beijing, and Tokyo

- **Climate first**
- **Single Materiality**

- **Requires implementation through legislation at national level**

Corporate Disclosure Regulation

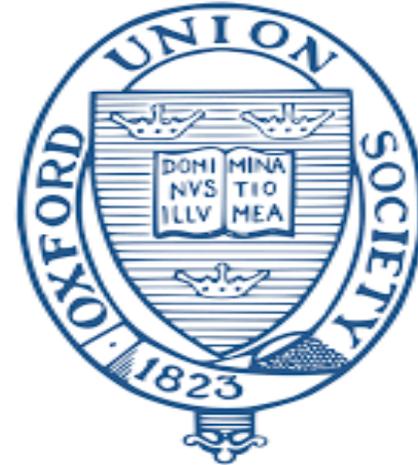


Standards for Non-Financial Disclosure?

A Debate At The Oxford Union: Should FASB And IASB Set Standards For Nonfinancial Information?

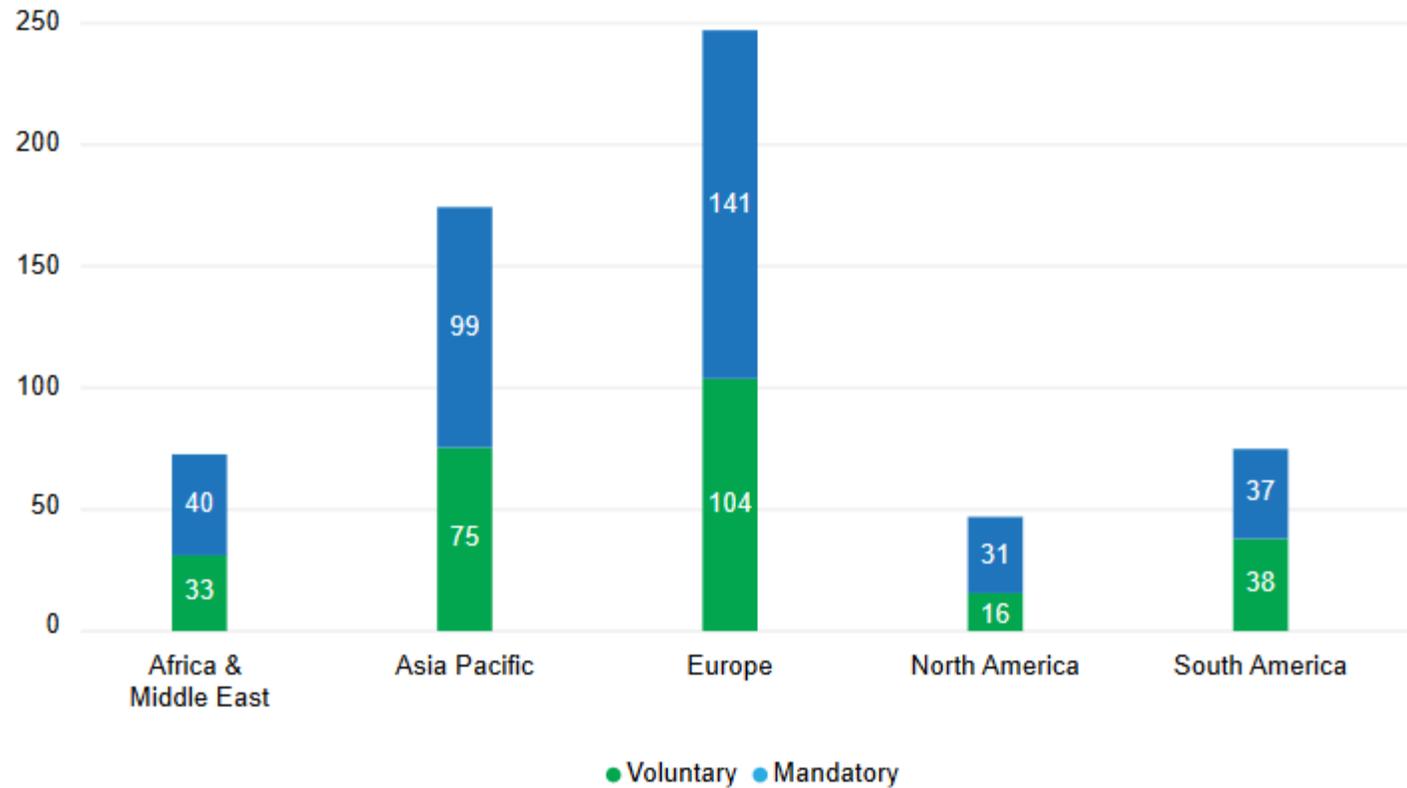
<https://www.forbes.com/sites/bobeccles/2018/11/03/a-debate-at-the-oxford-union-should-fasb-and-iasb-set-standards-for-nonfinancial-information/#35f9fdfe4393>

<https://www.youtube.com/watch?v=lyzkKFgp6NU>



Europe is leading the way

Figure 9 - Number of voluntary vs mandatory provisions by region (2020)



Key Developments towards Regulation and Standardization

- International level:
 - **IFRS Foundation** announcement at COP26 to create ISSB, integrating FRV and CDSB, by 2022.
 - The **WEF and IBC** Measuring Stakeholder Capitalism Report (including Deloitte, EY, KPMG and PwC)
- EU-Level:
 - The European Commission **Non-Financial Reporting Directive** (Directive 2014/95/EU) becoming the **Corporate Sustainability Reporting Directive (2022/23)**
 - The **EU Green Taxonomy** for the Classification of Sustainable Activities
 - The EU **Sustainable Finance Disclosure Regulation** (Regulation EU 2019/2088)
- UK:
 - Announcement to make **TCFD reporting** mandatory by 2025 (alongside others like New Zealand and Switzerland)
 - UK Corporate Governance Code, **Section 172**
- US:
 - **SEC announcement** to review climate change disclosure regulation in listed companies.
- Asia:
 - **China net-zero** announcement (Fiver-Year Plan, Peak 2030, Neutral before 2060)
 - **CSRC** working on mandatory ESG disclosures (delayed due to Covid)
 - **Taiwan Financial Supervisory Commission (FSC)** to make Environmental Disclosures Mandatory
 - **FSC Korea** Advances Initiatives to Respond to Climate Risk (TCFD)



Measuring Stakeholder Capitalism

21 metrics (34 expanded metrics)
in 4 Themes that

“have been selected for their universality across industries and business models,... for a true definition of long-term value definition in stakeholder capitalism”.

Principles of Governance	Governing purpose	1. Setting purpose	
	Quality of governing body	2. Governance body composition	
	Stakeholder engagement	3. Material issues impacting stakeholders	
	Ethical behaviour	4. Anti-corruption	
		5. Protected ethics advice and reporting mechanisms	
Risk and opportunity oversight	6. Integrating risk and opportunity into business process		
Planet	Climate change	7. Greenhouse gas (GHG) emissions 8. TCFD implementation	
	Nature loss	9. Land use and ecological sensitivity	
	Freshwater availability	10. Water consumption and withdrawal in water-stressed areas	
People	Dignity and equality	11. Diversity and inclusion (%) 12. Pay equality (%) 13. Wage level (%) 14. Risk for incidents of child, forced or compulsory labour	
		Health and well-being	15. Health and safety (%)
		Skills for the future	16. Training provided (#, \$)
		Prosperity	Employment and wealth generation
	Innovation of better products and services		20. Total R&D expenses (\$)
	Community and social vitality	21. Total tax paid	

European Commission **Corporate Sustainability Reporting Directive** (2022)

- Amends NFRD to comply more stringently with European Green Deal
- Part of the bigger “Sustainable Finance Strategy” of the EU
- Double Materiality lens (to be discussed)

Key changes involve:

- **Much wider application.**
 - Application to all companies listed on the EU regulated markets, except for micro companies.
 - SMEs fall under the scope, yet can implement until 2026
 - Will also apply to non-listed large undertakings (turnover over €40 million, balance sheet above € 20 million, or above 250 employees).
 - Application to insurance undertakings and credit institutions regardless of legal form
- Requires **reporting on full range of sustainability information** relevant to the company’s business in line with mandatory sustainability reporting standards to be developed by the EU Commission.
- Requires companies **to prepare their financial statement and management reports in a digital, machine-readable format** and to tag the sustainability information.
- Includes **mandatory auditing** (limited level) of NF reports, although audit framework not yet designed.



EU TAXONOMY

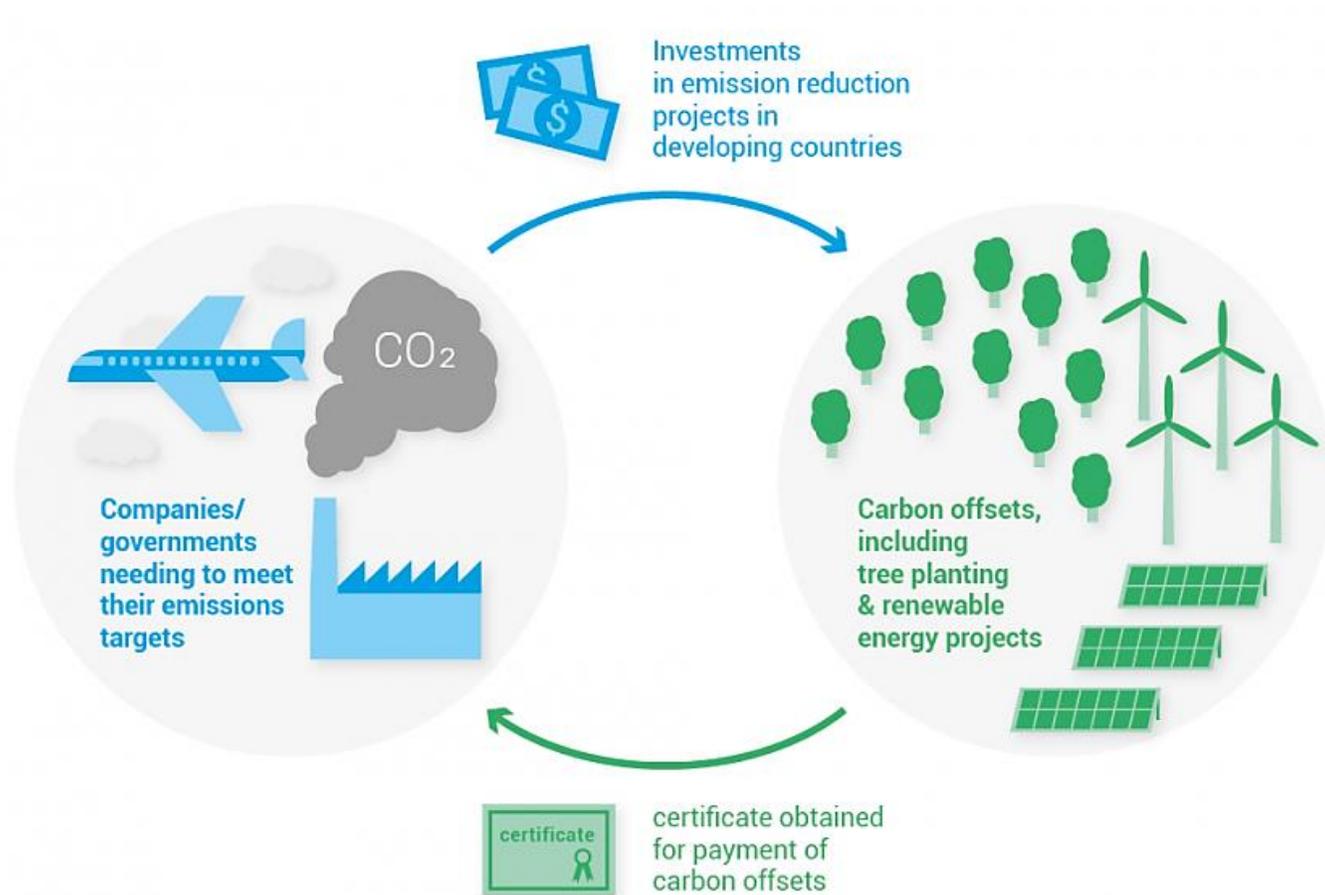
Classification tool aimed at investors, companies and financial institutions to define environmental performance of economic activities across a wide range of industries, and sets requirements corporate activities must meet to be considered sustainable.



The six Taxonomy environmental objectives:

- I. climate change mitigation;
- II. climate change adaptation;
- III. sustainable use and protection of water and marine resources;
- IV. transition to a circular economy, waste prevention and recycling;
- V. pollution prevention and control;
- VI. protection of healthy ecosystems.

CARBON OFFSETS



- **The Clean Development Mechanism (CDM)** – for countries under the Kyoto Protocol
- **The Gold Standard** – for NGOs
- **Verified Carbon Standard (certification)**

PROBLEM

- **Prices currently too low:**
Studies show that price needs to be 10x to encourage changes in behaviour.
- **Offsets often not audited:**
Greenwashing is a real concern
- **Timescale & missing guarantees:**
Often, offsets do not remove carbon in same time-frame as emission.

EU Sustainable Finance Disclosure Regulation (Regulation EU 2019/2088)

Published on the 9th of December 2019

Applies from the 10th of March 2021, with first mandatory reporting for large entities by June 2021 and July 2022.

Includes:

- Legal entity level disclosure
Particularly: mandatory disclosure of material negative effects on sustainability factors that are caused, compounded or directly linked to investment decisions and advice performed by legal entity.
- Product-level disclosure
 - Product Pre-contractual disclosure
 - Product website disclosure
 - Product periodic reports

The sustainability factors are pre-defined in a template and consist of:

32 mandatory indicators	16 environmental 16 social
18 voluntary indicators	11 environmental 7 social

→ Reports of integration or explanation of reason why deemed irrelevant

EU Sustainable Finance Disclosure Regulation (Regulation EU 2019/2088)

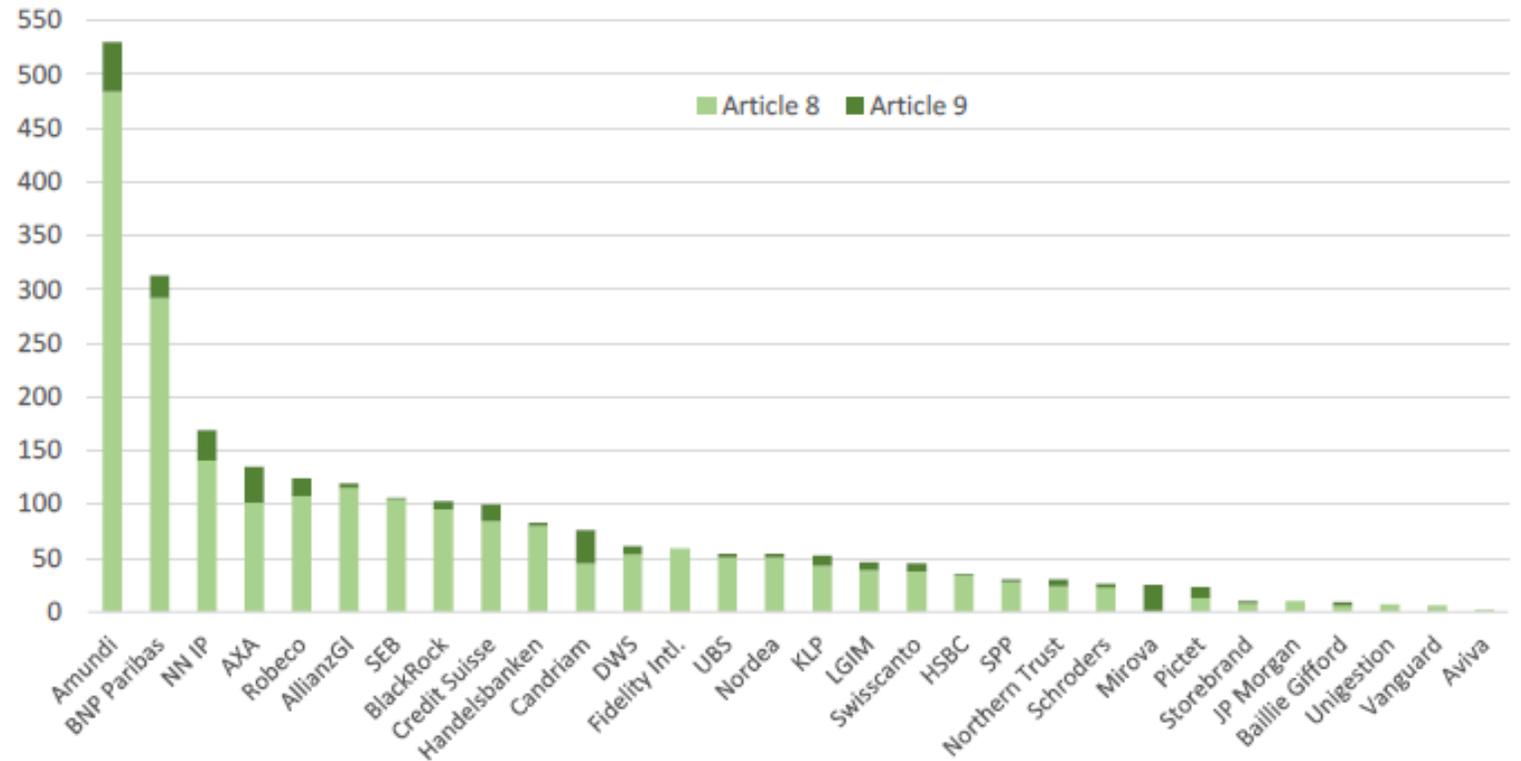
Product Level Disclosure

Article 9 funds: those funds that specifically have sustainable goals as their objective (for example investing in companies whose goal it is to reduce carbon emissions).

Article 8 funds: those funds that promote E or S characteristics but do not have them as the overarching objective.

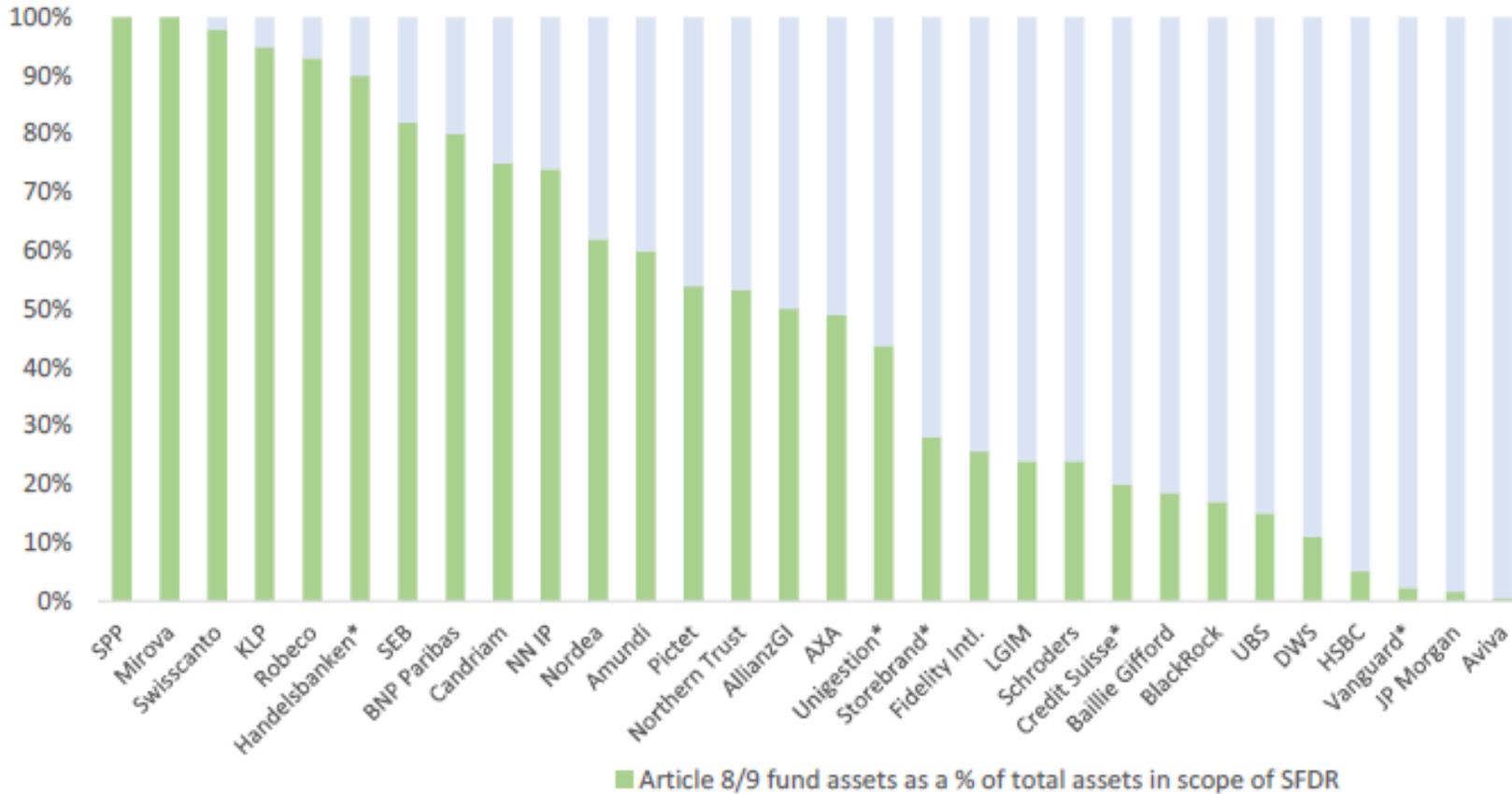
Article 6 funds: funds that are not promoted as having ESG factors or objectives.

Exhibit 2 Number of Article 8 and Article 9 Funds of 30 Surveyed Asset Managers



Source: Asset Managers. Data as of March 2020.

Exhibit 3 Article 8 and 9 Fund Assets as a Percentage of Total Assets in Scope of SFDR



Preliminary data from 30 asset managers found funds classified as Article 8 and 9 currently represent up to 21% of total European funds and up to 25% of total European fund assets.

→ €2.5 trillion

→ We are only at the beginning of this development.

Source: Asset Managers. (*) Estimated using Morningstar Direct. Data as of March 2020.



GOV.UK



Policy paper

UK joint regulator and government TCFD Taskforce: Interim Report and Roadmap

This report – and accompanying roadmap – outlines the UK’s approach to implementing the recommendations of the Taskforce on Climate-related Financial Disclosures.

Published 9 November 2020

From: [HM Treasury](#)

Details

In the 2019 Green Finance Strategy the government established a Taskforce, chaired by HMT and made up of regulators and government departments, to explore the most effective approach to implementing the recommendations of the TCFD.

The UK has announced its intention to make TCFD-aligned disclosures mandatory across the economy by 2025, with a significant portion of mandatory requirements in place by 2023. The UK Taskforce’s Interim Report, and accompanying roadmap, sets out an indicative pathway to achieving that ambition.



SEC Announces Task Force to Enforce ESG Disclosure Requirements

By [Randy Brogdon](#), [Melissa Horne](#) & [Angela Levin](#) on March 9, 2021

SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors

FOR IMMEDIATE RELEASE
2022-46

Washington D.C., March 21, 2022 — The Securities and Exchange Commission today proposed rule changes that would require registrants to include certain climate-related disclosures in their registration statements and periodic reports, including information about climate-related risks that are reasonably likely to have a material impact on their business, results of operations, or financial condition, and certain climate-related financial statement metrics in a note to their audited financial statements. The required information about climate-related risks also would include disclosure of a registrant's greenhouse gas emissions, which have become a commonly used metric to assess a registrant's exposure to such risks.



U.S. SECURITIES AND
EXCHANGE COMMISSION

Financial materiality lens

Listed Companies in Taiwan to Disclose GHG Emissions



By Regulation Asia

18th January 2022

2 mins read

The largest listed companies, as well as those in the steel and cement sectors, will have to disclose GHG emissions in their 2022 annual reports.

Taiwan's Financial Supervisory Commission (FSC) has proposed a new **roadmap** to promote the sustainable development of listed companies.

The FSC's roadmap to promote the sustainable development of listed companies is underpinned by five core strategies:

- Establish **governance structures** to promote sustainable development and the integration of ESG issues in **risk management policies and strategy** formulation
- Establish a cooperation mechanism with Taiwan's Environmental Protection Administration (EPA), the Ministry of Economic Affairs and other ministries to **increase the capacity of verification agencies** and improve the ability of enterprises to check their GHG emissions
- **Align with international standards** including the IFRS Foundation's International Sustainability Standards Board (ISSB), the EU's Corporate Sustainability Reporting Directive (CSRD), and the Glasgow Financial Alliance for Net Zero (GFANZ)
- **Cultivate internal corporate talents** at listed companies to promote the development and implementation of GHG inventory and information disclosure systems
- Establish (by the TWSE) an **ESG database and information sharing mechanism** to promote ESG evaluation of listed companies

BCSD Taiwan published two guides on ESG-related risks management



Report I:

"Enterprise Risk Management: Applying enterprise risk management to environmental, social, and governance-related risks"

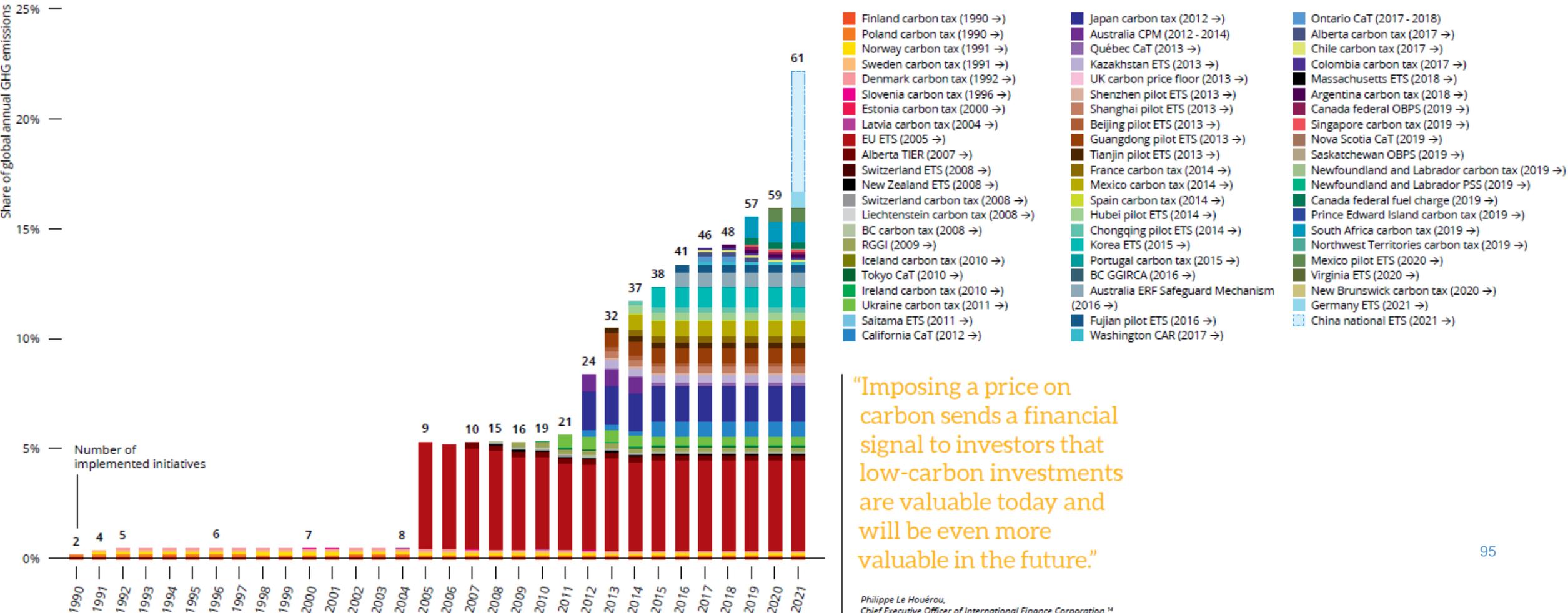
Report II:

"Guidance on improving the quality of ESG information for decision-making: Developing a roadmap for companies".

<https://www.wbcd.org/Overview/Global-Network/News/BCSD-Taiwan-published-two-guides-on-ESG-related-risks-management>

Increasingly relevant: Carbon pricing and taxation

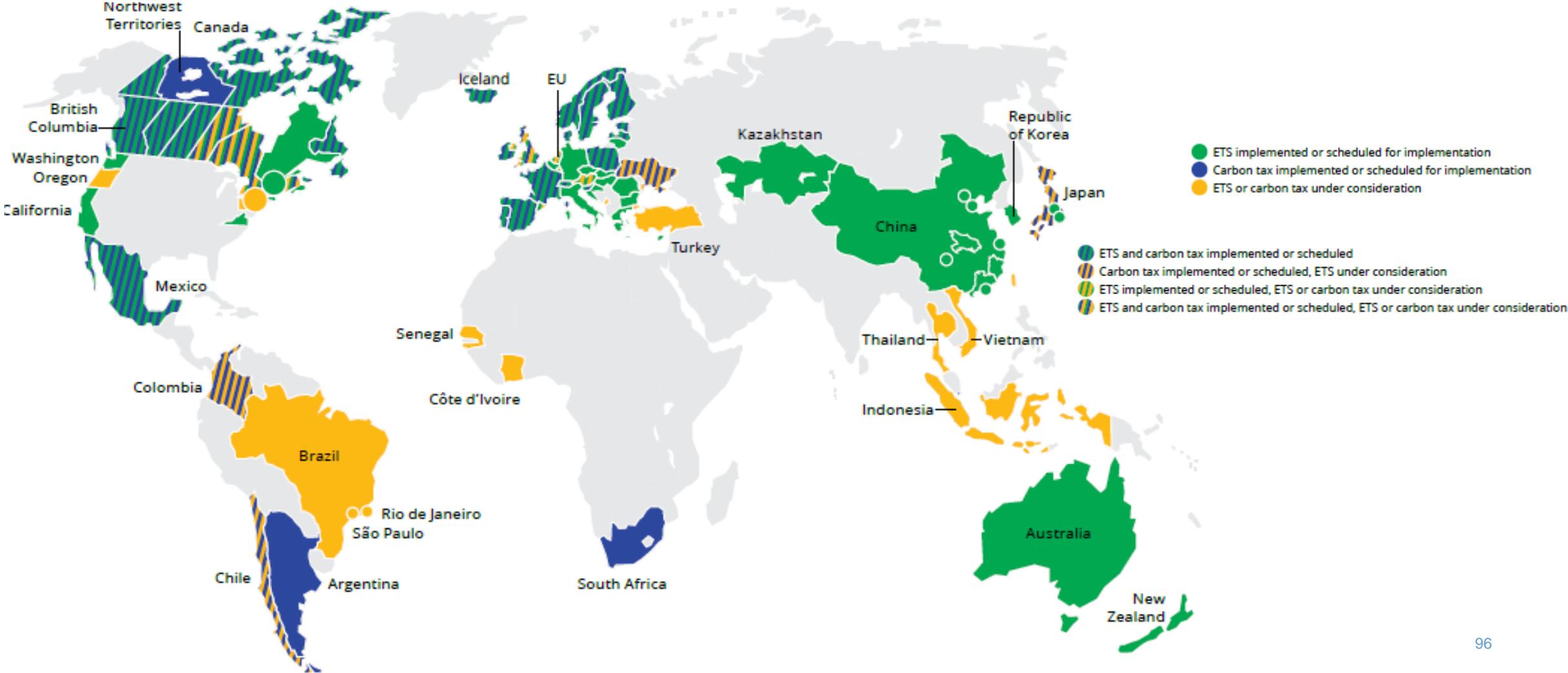
Figure ES.2 / Share of global emissions covered by carbon pricing initiatives (ETS and carbon tax)



“Imposing a price on carbon sends a financial signal to investors that low-carbon investments are valuable today and will be even more valuable in the future.”

Philippe Le Houérou, Chief Executive Officer of International Finance Corporation.™

Markets are being created



Suggested Reading

- Vörösmarty, C.J. et al. 2018 Scientifically assess impacts of sustainable investments. Science Vol 359
- Impact Management Project 2020 Statement of Intent to Work Together Towards Comprehensive Corporate Reporting.
<https://impactmanagementproject.com/structured-network/statement-of-intent-to-work-together-towards-comprehensive-corporate-reporting/>
- World Economic Forum 2020 Measuring Stakeholder Capitalism Report.
https://www.wlrk.com/docs/WEF_IBC_Measuring_Stakeholder_Capitalism_Report_2020.pdf
- Barker and Eccles 2018: Should FASB and IASB Be Responsible for Setting Standards for Nonfinancial Information? Green Paper.
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3272250
- IFRS 2020 Consultation Paper on Sustainability Reporting <https://cdn.ifrs.org/-/media/project/sustainability-reporting/consultation-paper-on-sustainability-reporting.pdf?la=en>
- Farmer and Thompson 2020 The Ripple Effect of EU Taxonomy for Sustainable Investments in U.S. Financial Sector.
<https://corpgov.law.harvard.edu/2020/06/10/the-ripple-effect-of-eu-taxonomy-for-sustainable-investments-in-u-s-financial-sector/>

MATERIALITY

DR JUDITH STROEHLE



ESG Investing

MATERIALITY

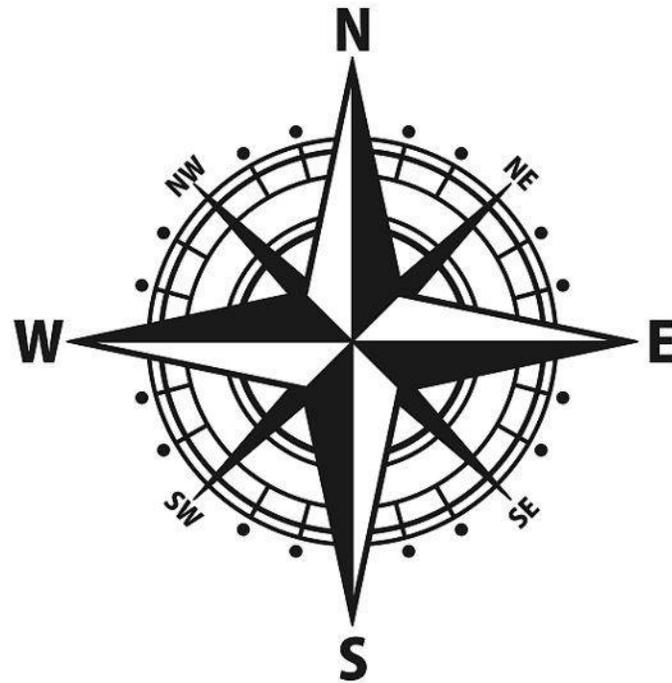
Concept from Financial Accounting

- SEC Rule 405 under the Securities Act of 1933 provides that "when used to qualify a requirement for the furnishing of information as to any subject,"

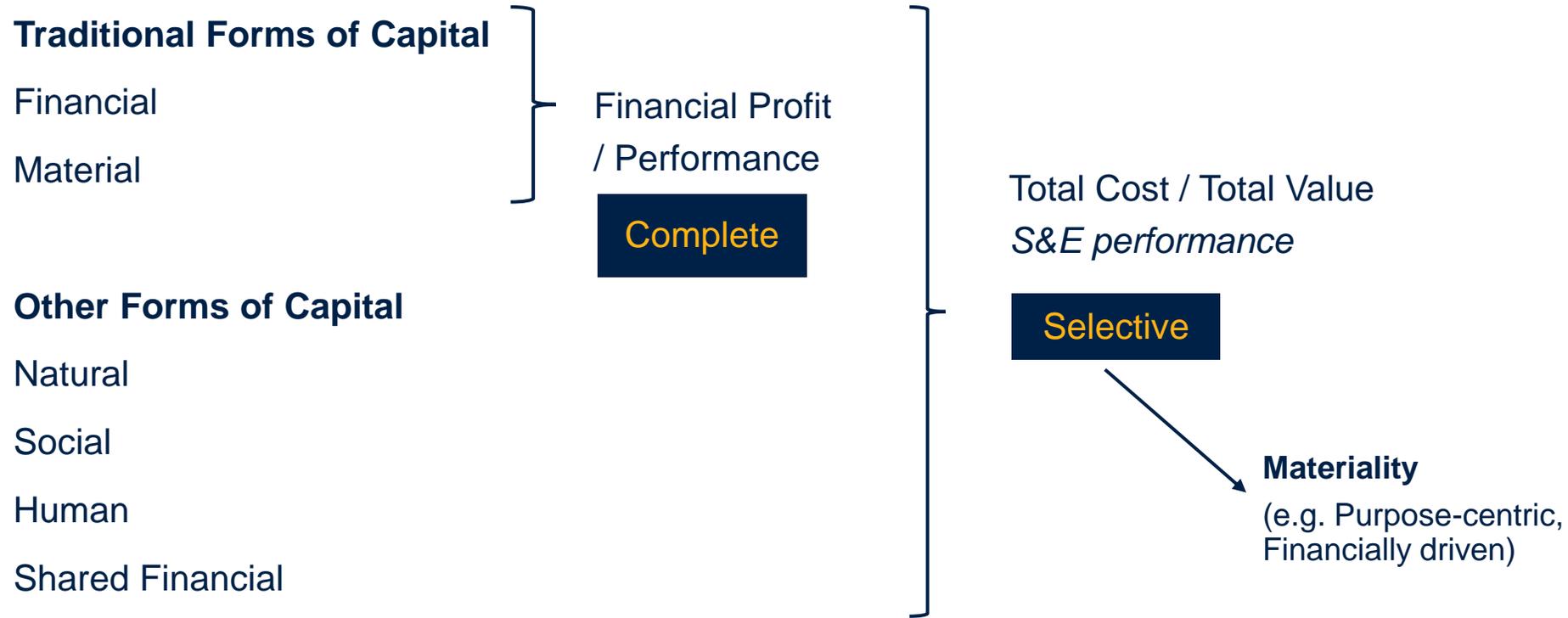
Materiality "limits the information required to those matters to which there is a substantial likelihood that a reasonable investor would attach importance in determining whether to purchase the security registered."

- SEC Rule 12b2,8 under the Securities Exchange Act of 1934, differs slightly from Rule 405, defining materiality as information "to which there is a substantial likelihood that a reasonable investor would attach importance in determining whether to buy or sell the securities registered."

Why Materiality?

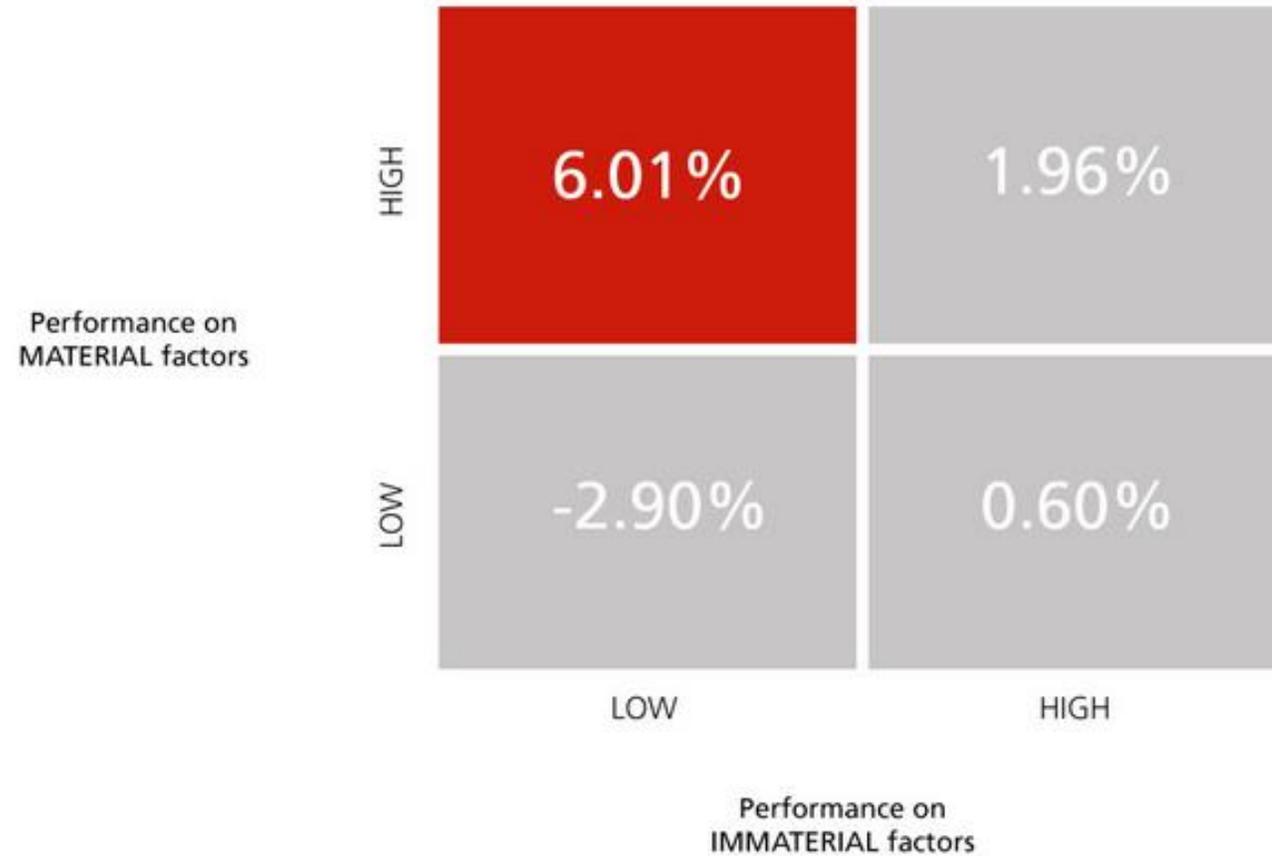


WHY MATERIALITY IN ESG?



MATERIALITY MATTERS

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



MATERIALITY MATTERS

Material Index



Firms That Perform Well on Material Issues Enjoy Enhanced Accounting and Market Returns Over Firms That Perform Poorly on These Factors. 33

MATERIALITY MATTERS

Immaterial Index



Firms That Perform Well on Immaterial Issues Do Not Achieve Better Returns Than Firms That Perform Poorly on These Factors.

What is Materiality in the context of Sustainability?



Materiality is defined as the impact on the firm on its environment and society

Materiality as Externality

Materiality is defined as the impact of society and environment on the firm (and its financial performance)

Financial Materiality

Agreement: Materiality is industry-specific

SASB Materiality Map

<https://materiality.sasb.org/>

- Identification of financially material issues on industry-level
- 5 Dimensions and 26 sustainability-related issues
- Mapped onto 11 sectors and 77 industries

Sector Level Map

- Issue is likely to be material for more than 50% of industries in sector
- Issue is likely to be material for fewer than 50% of industries in sector
- Issue is not likely to be material for any of the industries in sector

Industry Level Map

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

SASB Materiality Map

Sector Level Map

- Issue is likely to be material for more than 50% of industries in sector
- Issue is likely to be material for fewer than 50% of industries in sector
- Issue is not likely to be material for any of the industries in sector

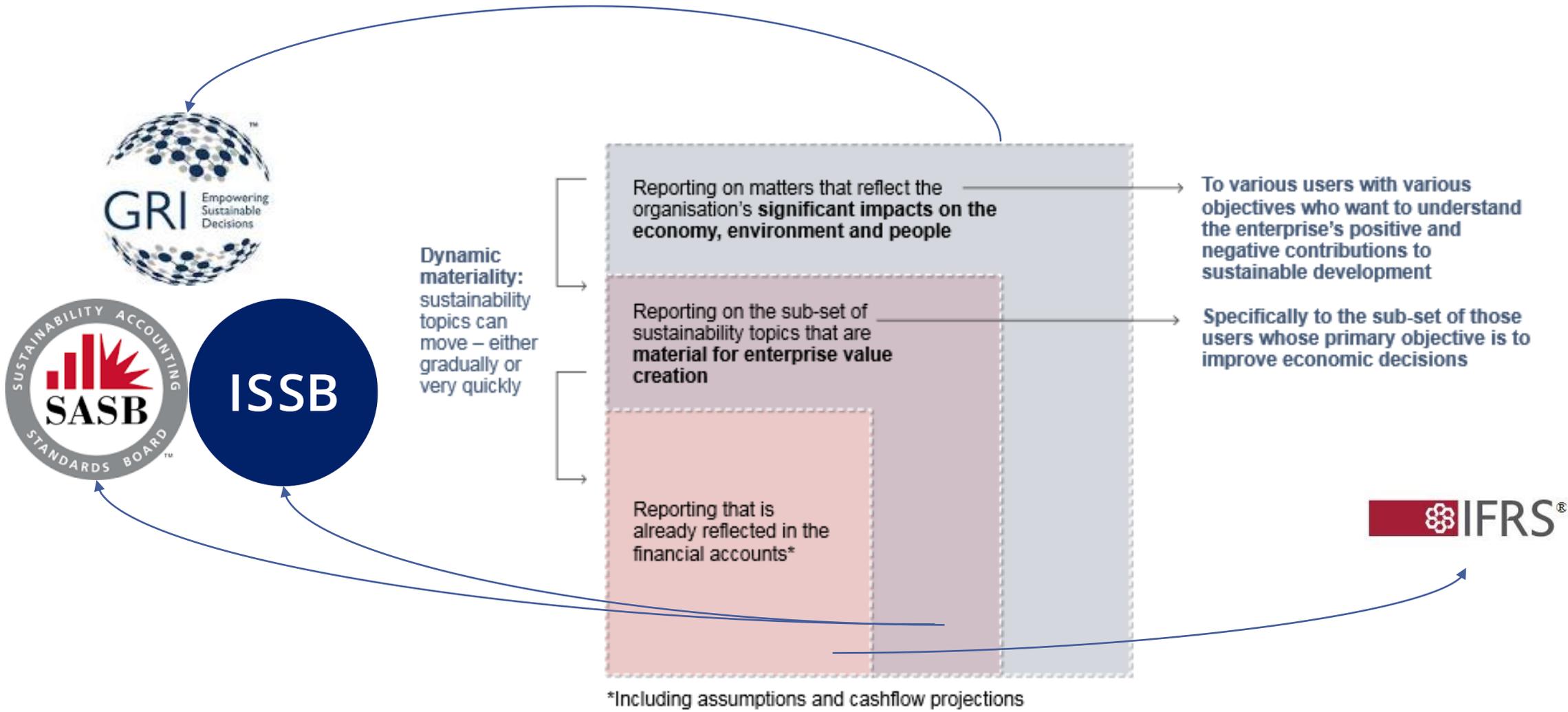
		Consumer Goods	Extractives & Minerals Processing	Financials	Food & Beverage	Health Care	Infrastructure
Dimension	General Issue Category ^o	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand	Click to expand
Environment	GHG Emissions		■		■	■	■
	Air Quality		■				■
	Energy Management	■	■		■	■	■
	Water & Wastewater Management	■	■		■		■
	Waste & Hazardous Materials Management		■		■	■	■
	Ecological Impacts		■		■		■
Social Capital	Human Rights & Community Relations		■			■	
	Customer Privacy	■		■			
	Data Security	■		■	■	■	
	Access & Affordability			■		■	■
	Product Quality & Safety	■			■	■	■
	Customer Welfare				■	■	
	Selling Practices & Product Labeling			■	■	■	
Human Capital	Labor Practices	■	■		■		■
	Employee Health & Safety		■		■	■	■
	Employee Engagement, Diversity & Inclusion	■		■		■	
Business Model & Innovation	Product Design & Lifecycle Management	■	■	■	■	■	■
	Business Model Resilience		■				■
	Supply Chain Management	■			■	■	
	Materials Sourcing & Efficiency	■			■		■
	Physical Impacts of Climate Change			■		■	
Leadership & Governance	Business Ethics		■	■		■	■
	Competitive Behavior		■				
	Management of the Legal & Regulatory Environment		■				107
	Critical Incident Risk Management		■				■
	Systemic Risk Management			■			■

SASB Materiality Map

Industry Level Map

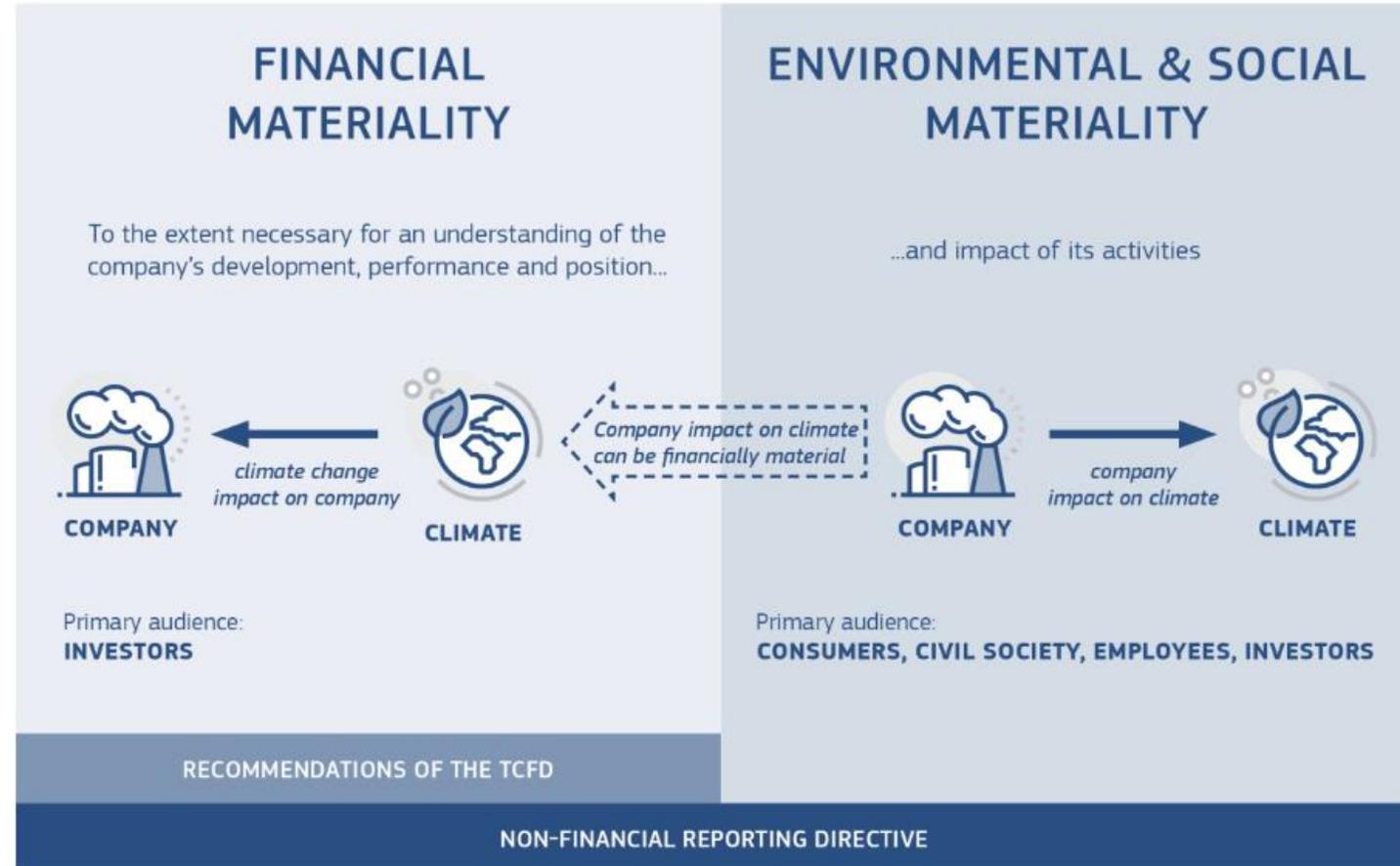
- Not likely a material issue for companies in the industry
- Likely a material issue for companies in the industry

		Consumer Goods							
Dimension	General Issue Category [®]	Apparel, Accessories & Footwear	Appliance Manufacturing	Building Products & Furnishings	E-Commerce	Household & Personal Products	Multiline and Specialty Retailers & Distributors	Toys & Sporting Goods	Coal Operations
Environment	GHG Emissions								
	Air Quality								
	Energy Management								
	Water & Wastewater Management								
	Waste & Hazardous Materials Management								
	Ecological Impacts								
Social Capital	Human Rights & Community Relations								
	Customer Privacy								
	Data Security								
	Access & Affordability								
	Product Quality & Safety								
	Customer Welfare								
	Selling Practices & Product Labeling								
Human Capital	Labor Practices								
	Employee Health & Safety								
	Employee Engagement, Diversity & Inclusion								
Business Model & Innovation	Product Design & Lifecycle Management								
	Business Model Resilience								
	Supply Chain Management								
	Materials Sourcing & Efficiency								
	Physical Impacts of Climate Change								
Leadership & Governance	Business Ethics								
	Competitive Behavior								
	Management of the Legal & Regulatory Environment								
	Critical Incident Risk Management								
	Systemic Risk Management								



Double Materiality

*The double materiality perspective of the Non-Financial Reporting Directive
in the context of reporting climate-related information*



* Financial materiality is used here in the broad sense of affecting the value of the company, not just in the sense of affecting financial measures recognised in the financial statements.

Dynamic materiality

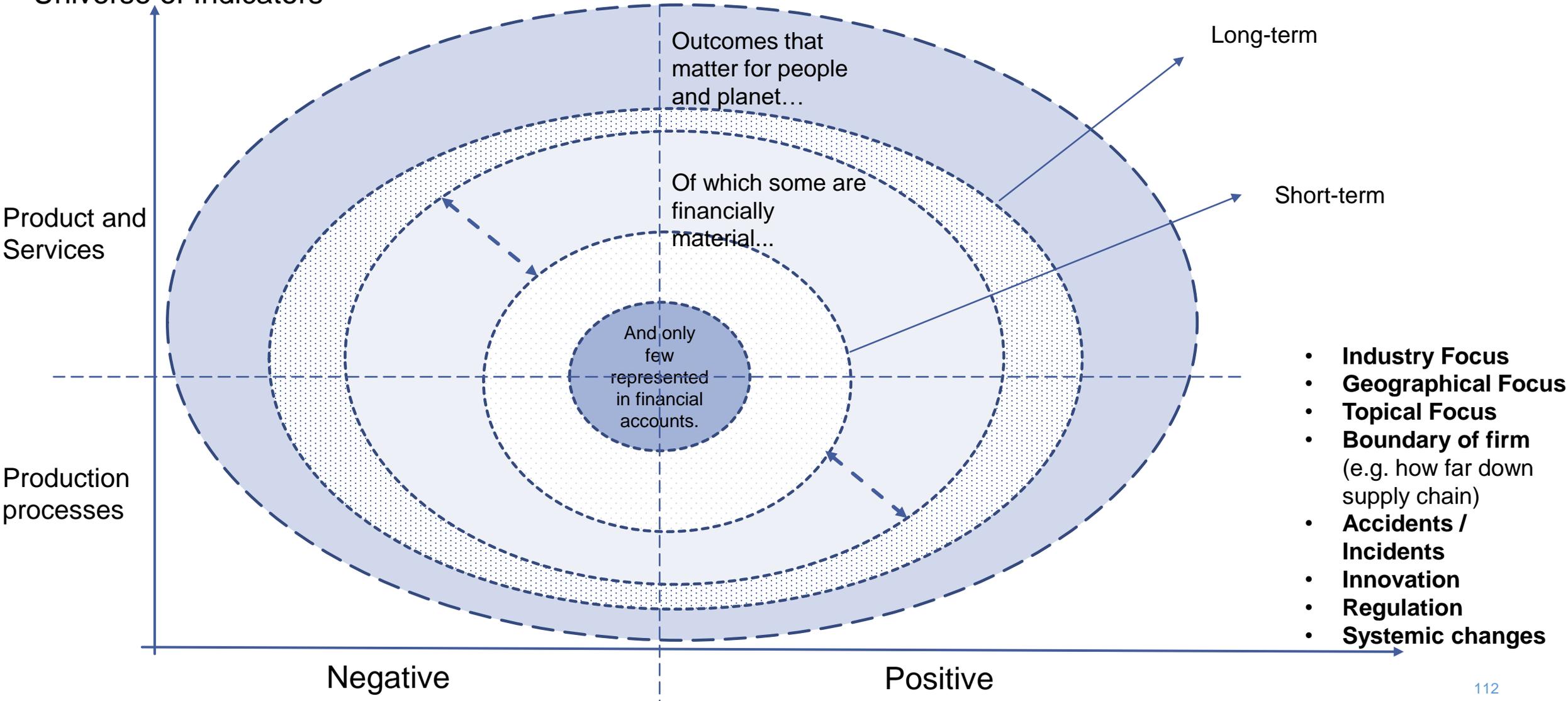
Materiality is:

Risk Exposure x Time

Factors that can influence risk exposure are multiple

- Stakeholder perspectives
- Industry-specific risks
- Asset class specific risks
- Geographic (geological or geopolitical) risk
- Susceptible to stakeholder influence, power (regulation) and expectation (green consumerism)
- Affected by incidents (scandals and accidents)
- and market changes (new technologies and innovations)
- Susceptible to systemic changes (climate change, income inequality, biodiversity loss)

Universe of Indicators



Dynamic materiality

Figure 3. Dynamic Materiality in Semiconductors: Data Security

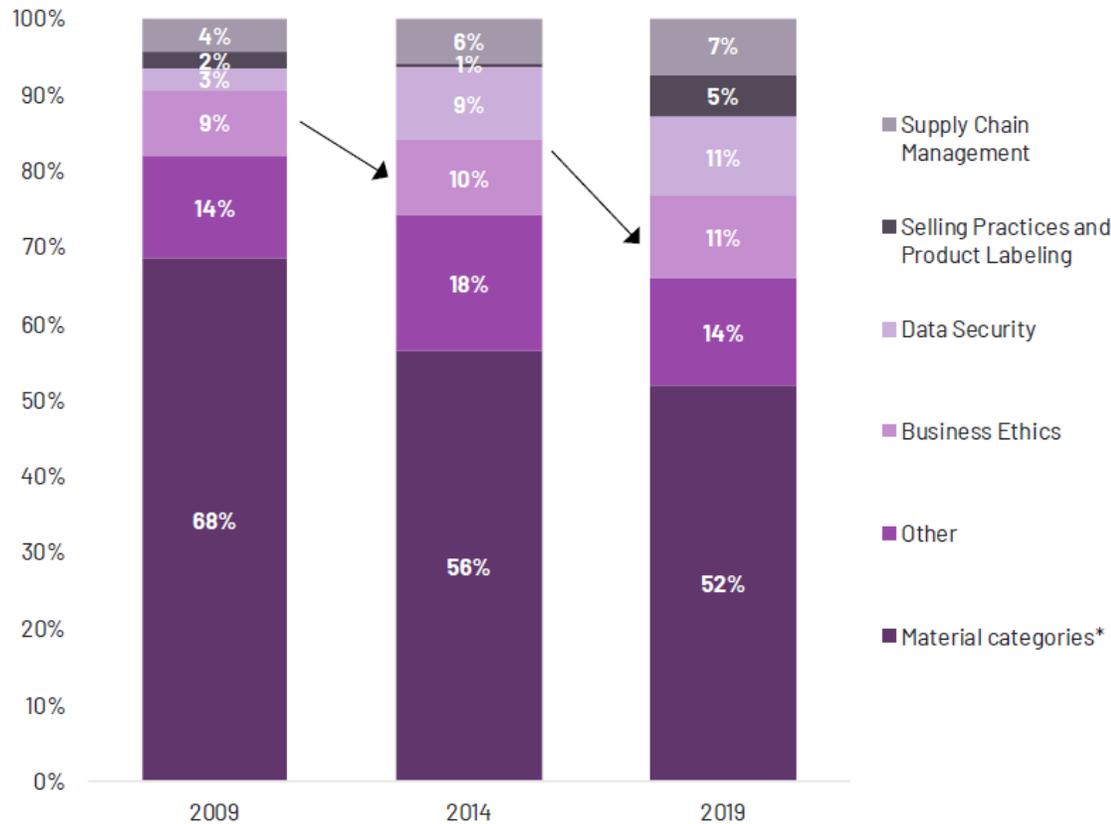
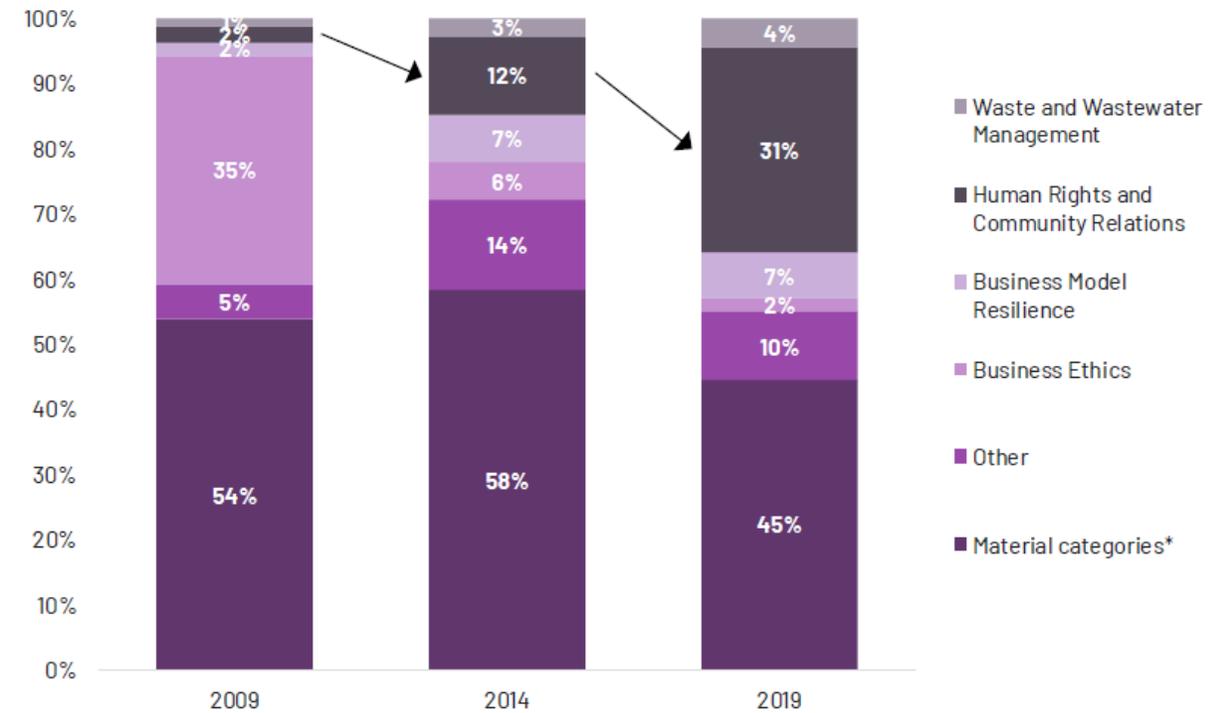


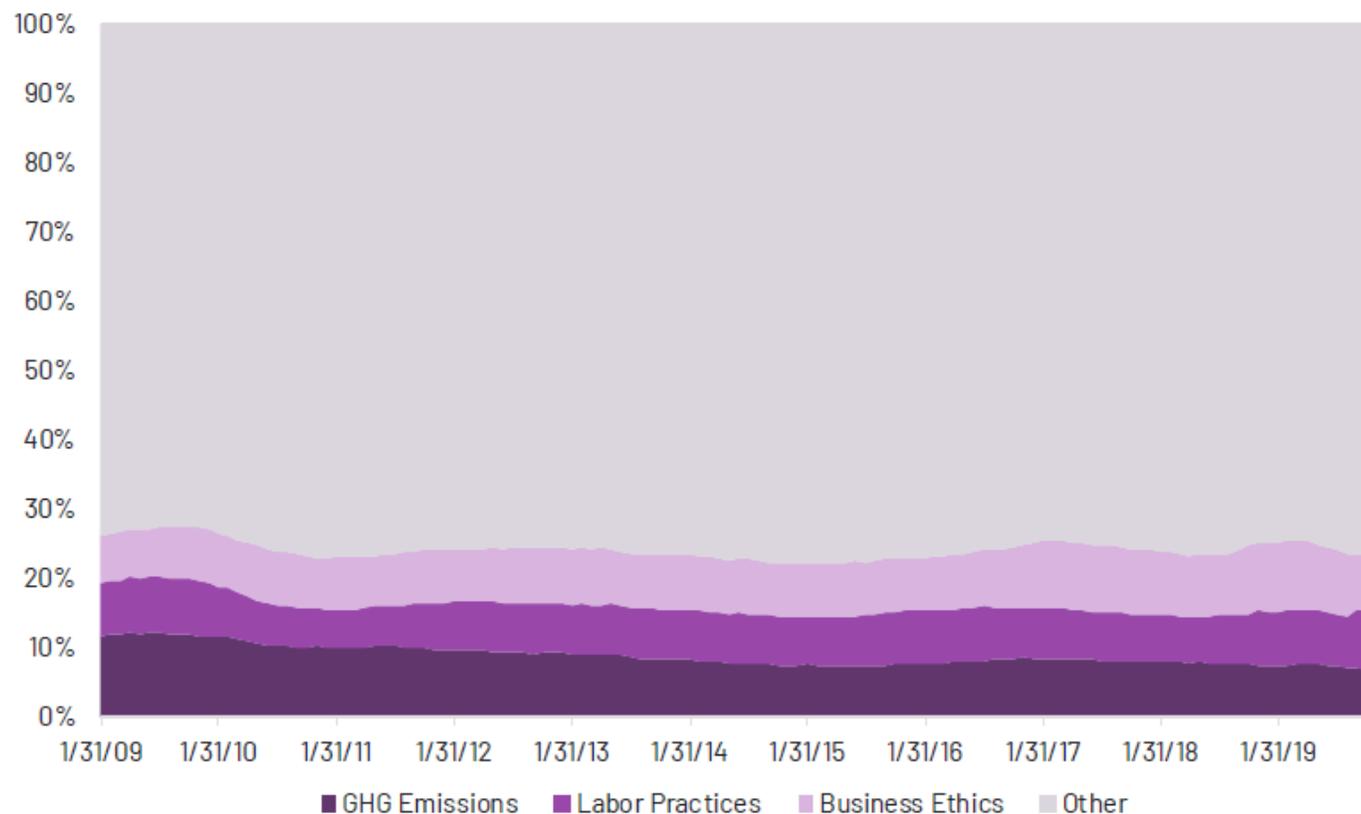
Figure 4. Dynamic Materiality in Midstream Oil & Gas: Human Rights and Community Relations



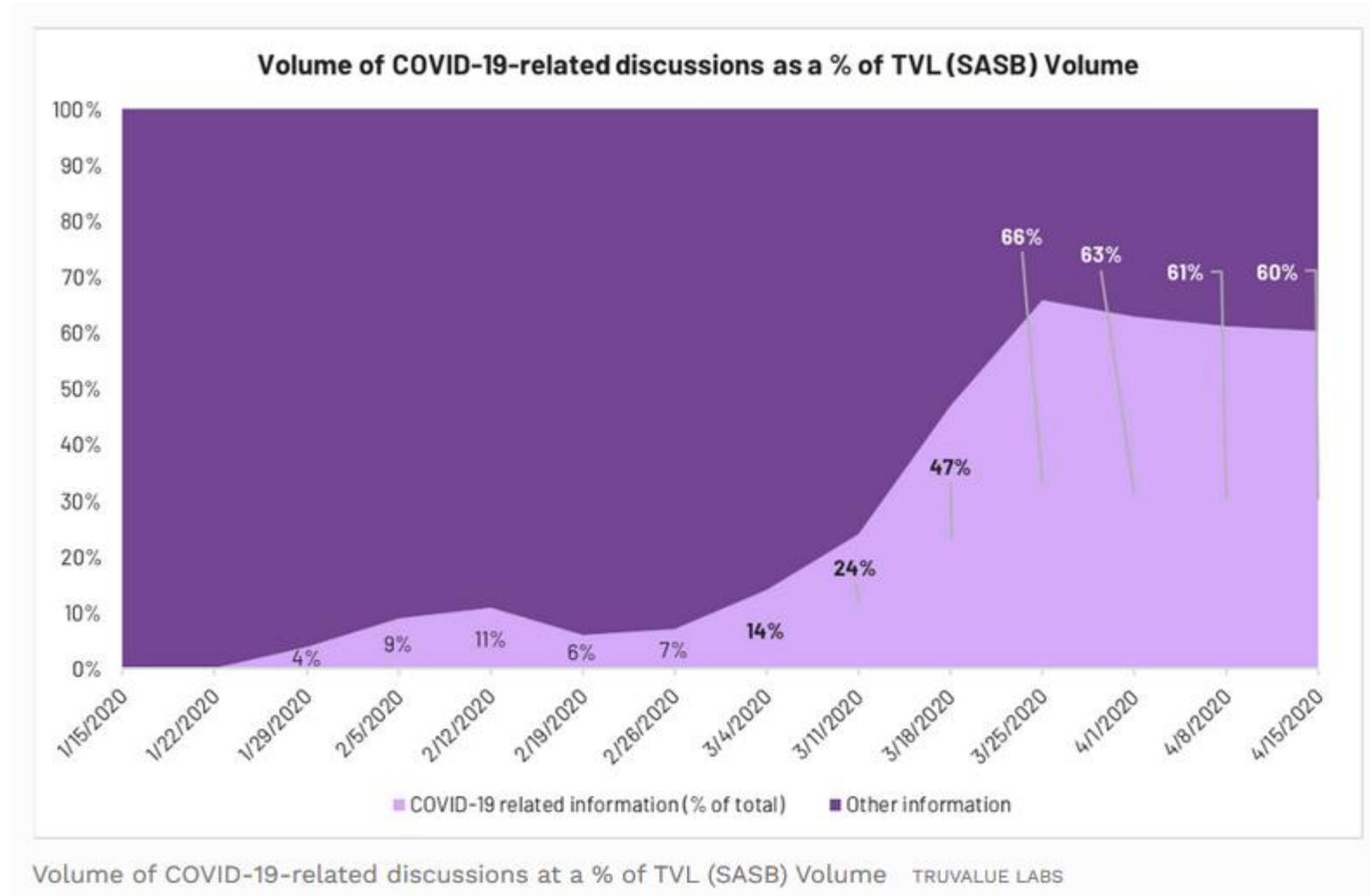
Core materiality

Consistency across industries and sectors over time with respect to certain issues (GHG, labour and ethics) discussed by stakeholders or society.

Figure 5. Core Materiality: GHG Emissions, Labor and Business Ethics make up ~25% of all ESG data volume

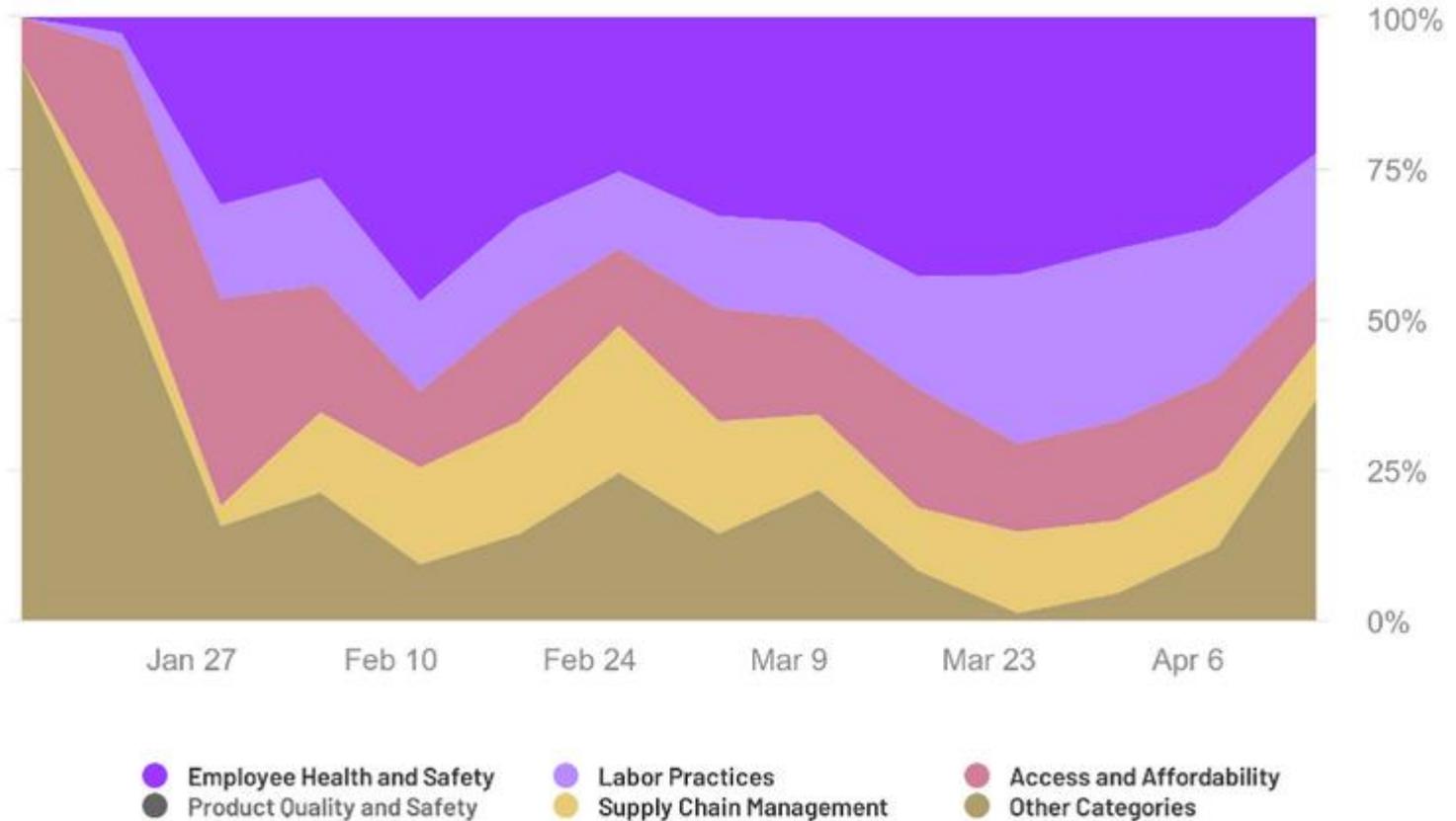


Dynamic materiality during Covid-19



Dynamic materiality during Covid-19

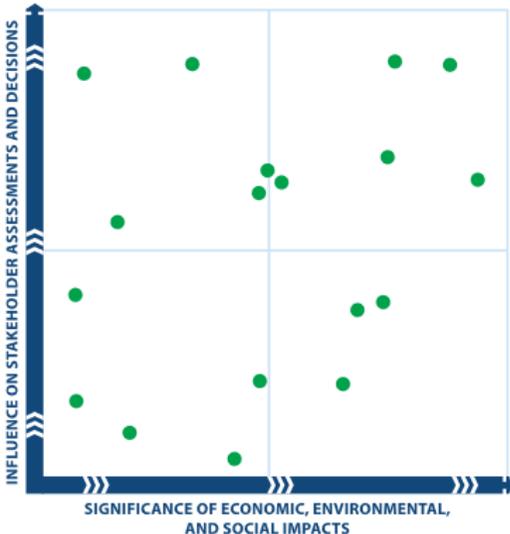
SASB Category Focus within COVID-19 Content



TRUVALUE LABS

Do investors and companies agree on what is material?

FIGURE 2. VISUAL REPRESENTATION OF THE PRIORITIZATION OF ASPECTS AND TOPICS



Source: GRI, G4 Sustainability Reporting Guidelines, *Implementation Manual* (p. 12), 2013.

FIGURE 3. VISUAL REPRESENTATION OF RESULTS OF PRIORITIZATION

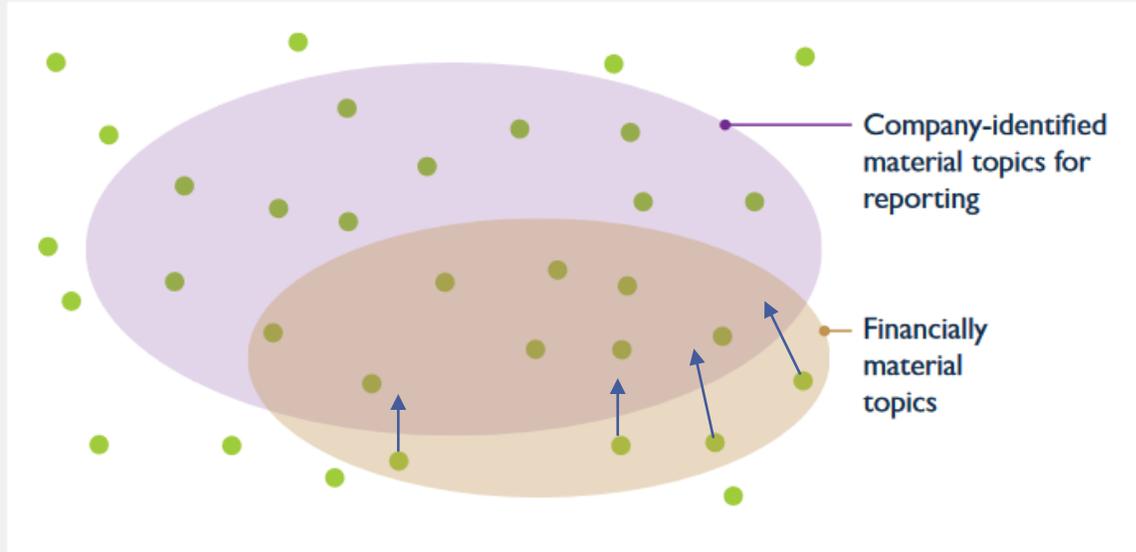


Source: RobecoSAM.

Do investors and companies agree on what is material?

FIGURE 4. THE UNIVERSE OF MATERIAL TOPICS

Simplified representation of sustainability topics and how they might be classified as being material for reporting and/or financially material



● Sustainability topics

FIGURE 17. COMPARISON OF ISSUES IDENTIFIED BY COMPANIES AND INVESTORS

Issue	MINING		METALS		ELECTRIC UTILITIES	
	Companies	Investors	Companies	Investors	Companies	Investors
1	Environment	Environment	Environment	Climate	Environment	Climate
2	Occupational Health and Safety	Communities	Occupational Health and Safety	Environment	Occupational Health and Safety	Environment
3	Communities	Occupational Health and Safety	Communities	Occupational Health and Safety	Climate	Customers
4	Labor	Labor	Climate	Communities	Communities	Innovation

Please note that in this figure the GRI Aspects identified as most reported in section 3 of this publication are aggregated into larger themes for the purposes of comparison, for example, the issue of environment includes the GRI Aspects Energy, Biodiversity and Water.
Source: GRI and RobecoSAM.

Addressing prioritization

Addressing scope

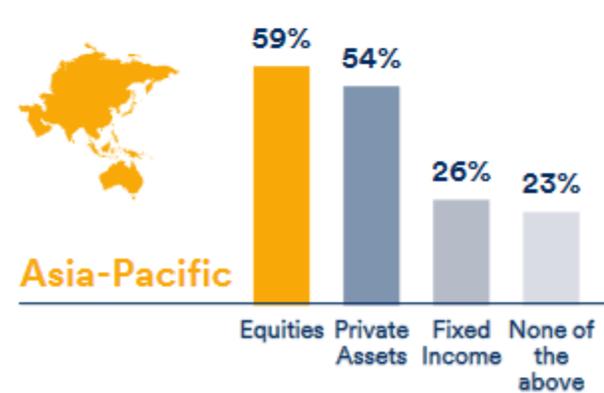
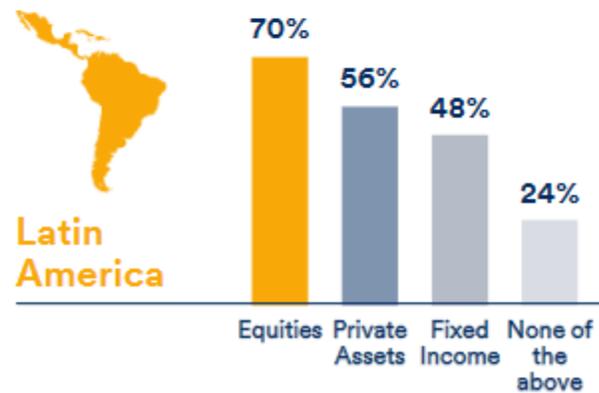
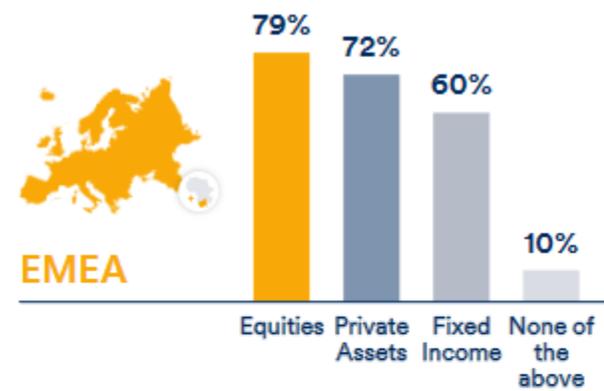
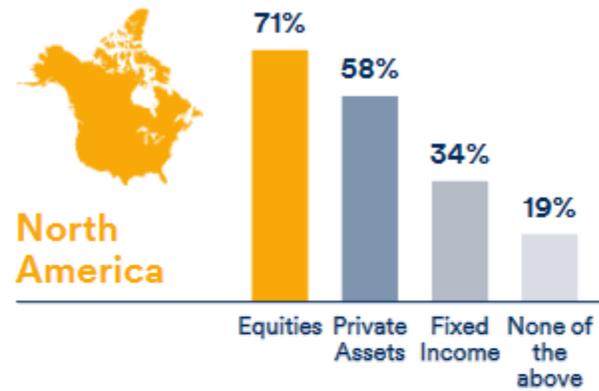
SESSION III: ESG INVESTMENT PRACTICE

DR JUDITH STROEHLE



ESG Investing

ESG INVESTING



Sustainable / ESG Investing



“Sustainable and responsible investment (“SRI”) is a long-term oriented investment approach which integrates ESG factors in the research, analysis and selection process of securities within an investment portfolio.

It combines fundamental analysis and engagement with an evaluation of ESG factors in order to better capture long term returns for investors, and to benefit society by influencing the behaviour of companies.”

Eurosif, 2018

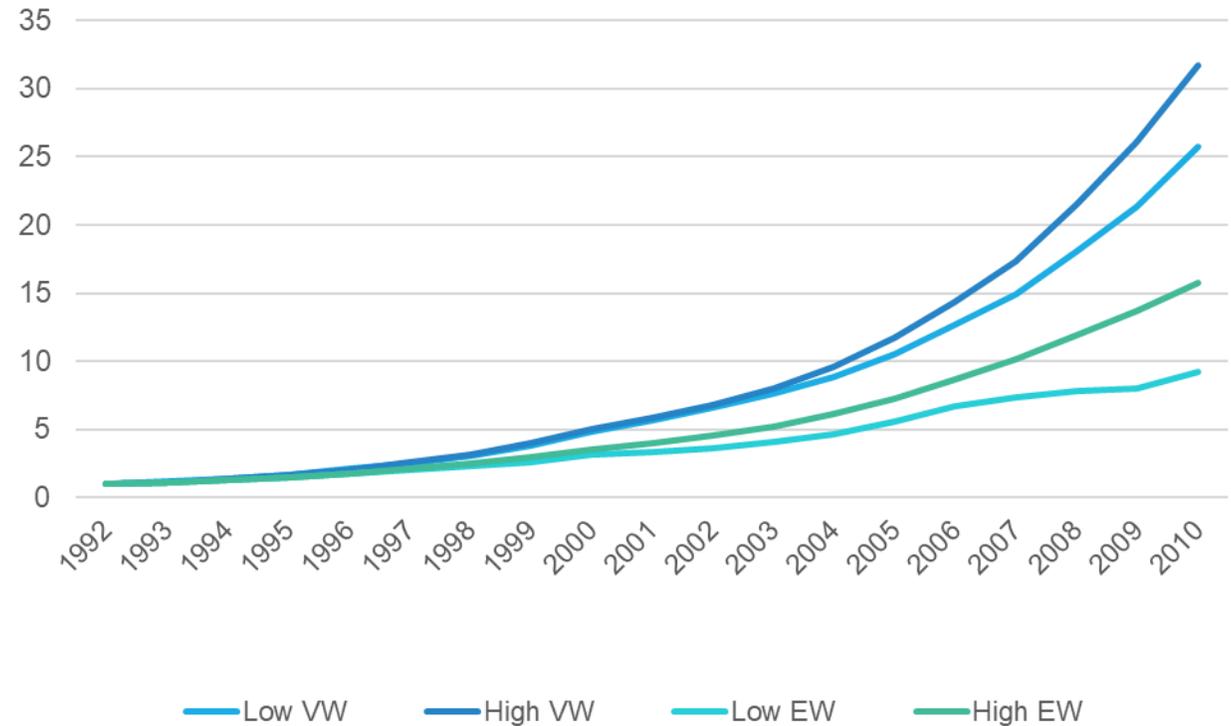
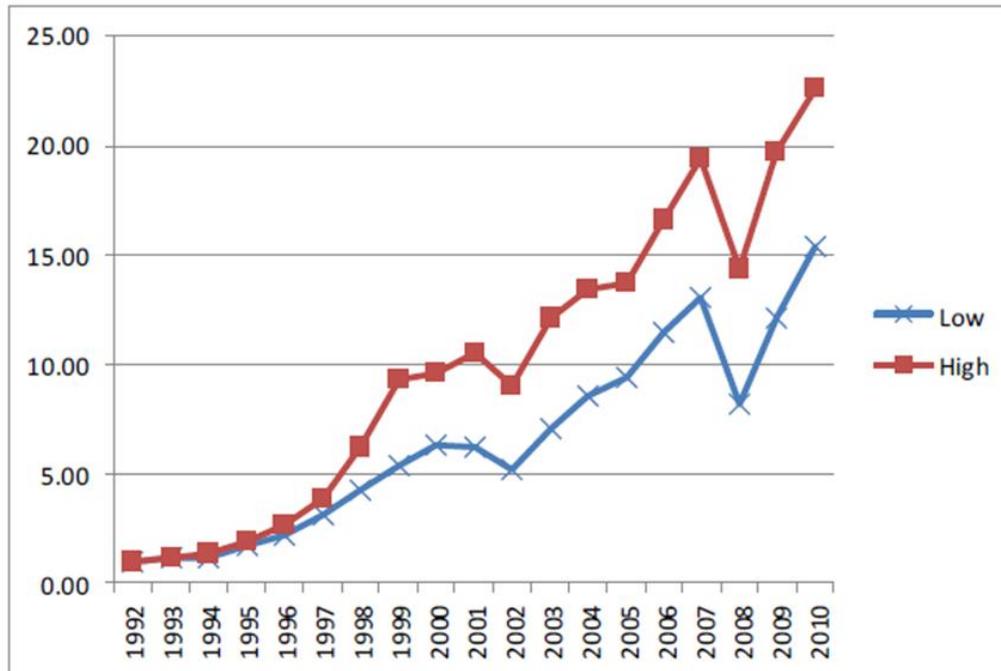
WHY IS ESG INVESTING BECOMING MORE IMPORTANT?

1. Universal Ownership thesis: the size of many investors and firms is system-critical
2. Growing evidence for a correlation between ESG and long-term financial returns
3. ESG mainstreaming means growing demand is reality, not aspiration
4. Concerns about fiduciary duty and shareholder primacy are shifting
5. ESG has started to trickle-down to the portfolio and fundamental analysis level
6. More investors are practicing ESG activism

Source: Eccles and Klimenko (2019): The Investor Revolution. Harvard Business Review (April).

Growing Evidence for a correlation between ESG and long-term returns

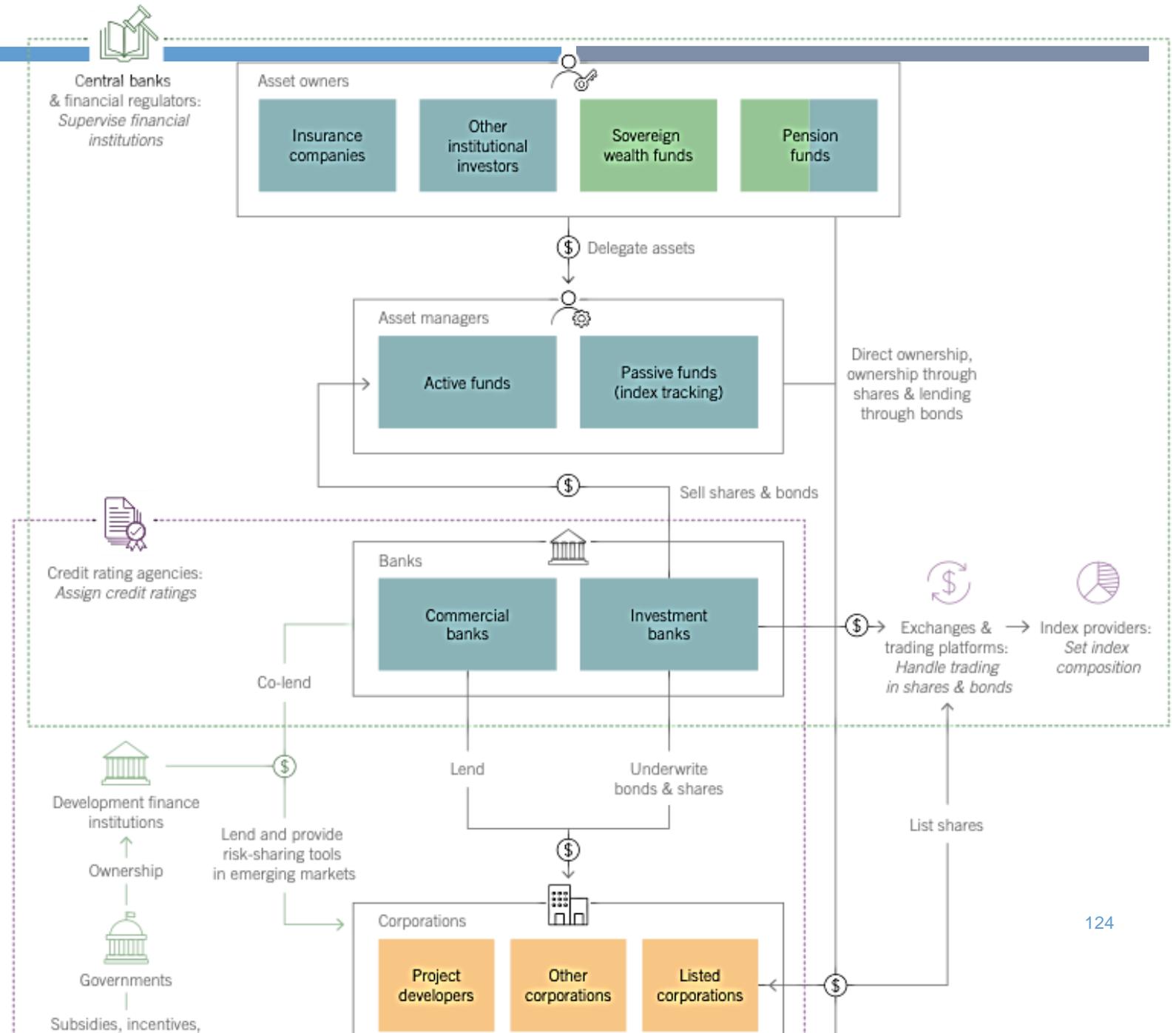
Evolution of \$1 invested in the stock market in value-weighted portfolios



Eccles, Robert G., Ioannis Ioannou, and George Serafeim. "The Impact of Corporate Sustainability on Organizational Processes and Performance." *Management Science* 60, no. 11 (November 2014): 2835–2857.

- For High and Low Sustainability firms
- Return-on-Equity (ROE)
- * Value versus equity-weighted portfolios

...and the pressure rises through the Investment chain



ESG INVESTMENT STRATEGIES

Categorization of Strategies

- This review follows the classification of SRI approaches introduced in 2012.

The seven categories of strategies identified in this Study are:

- 1. Exclusion of holdings from investment universe;
 - 2. Norms-based screening;
 - 3. Sustainability themed investment;
 - 4. Best-in-Class investment selection;
 - 5. ESG Integration factors in financial analysis;
 - 6. Engagement and voting on sustainability matters;
 - 7. Impact investing.
-
- Eurosif's classification closely aligns with other frameworks available to the industry. Nevertheless, underlying details of each definition may reveal some variation¹.

1. Exclusion from holdings in universe

“This approach systematically excludes companies, sectors, or countries from the permissible investment universe if involved in certain activities based on specific criteria.

Exclusions can be applied at individual fund or mandate level, but increasingly also at asset manager or asset owner level, across the entire product range of assets”

Eurosif, 2018

To Divest or not to Divest?

Usefulness of exclusion is debated:

- Questionable whether sustainable outcomes can be achieved
- Asset owners cannot readily make use of it due to fiduciary duty

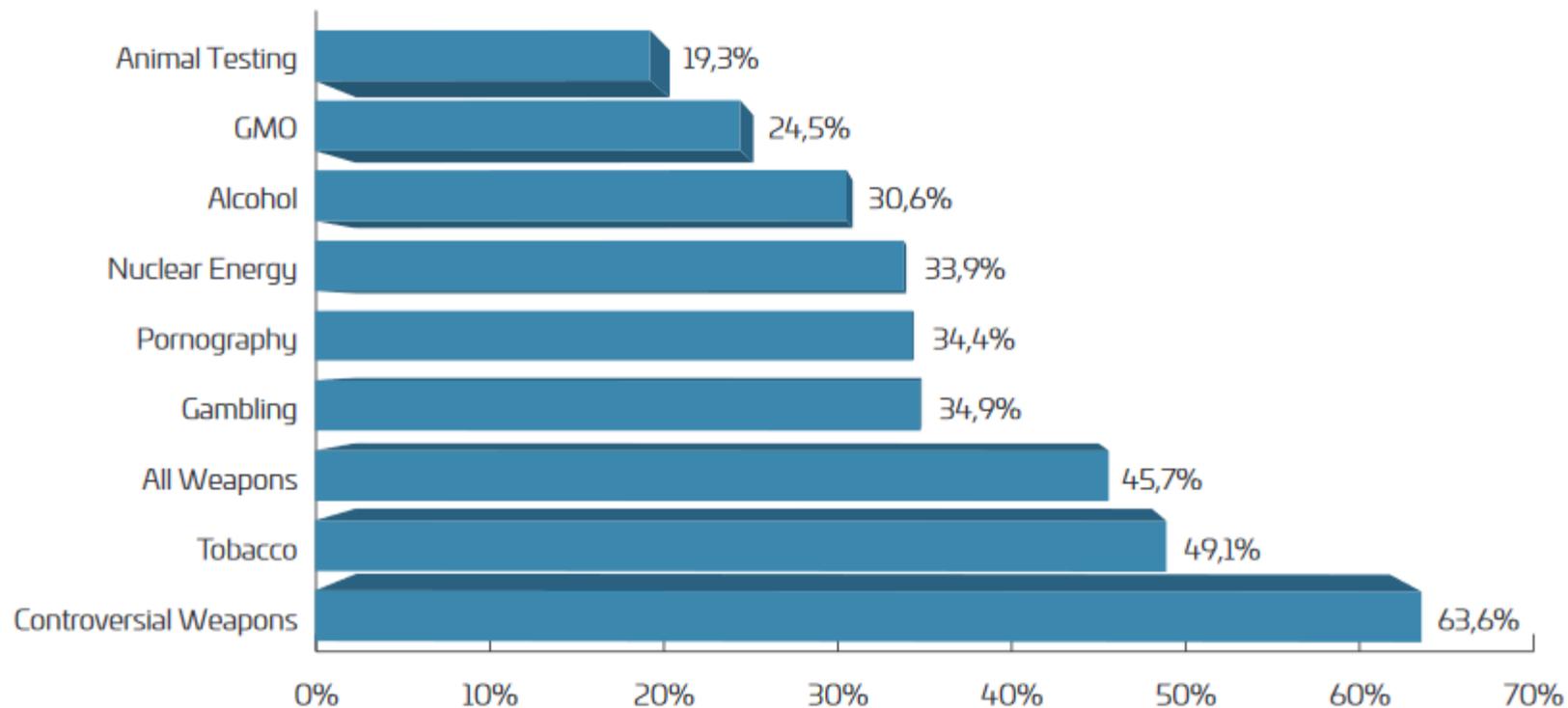
But:

- Is a valid option for ethical reasons
- Is an easy way to “decarbonize” portfolio

LEADS TO QUESTIONS OF EXIT VS. VOICE

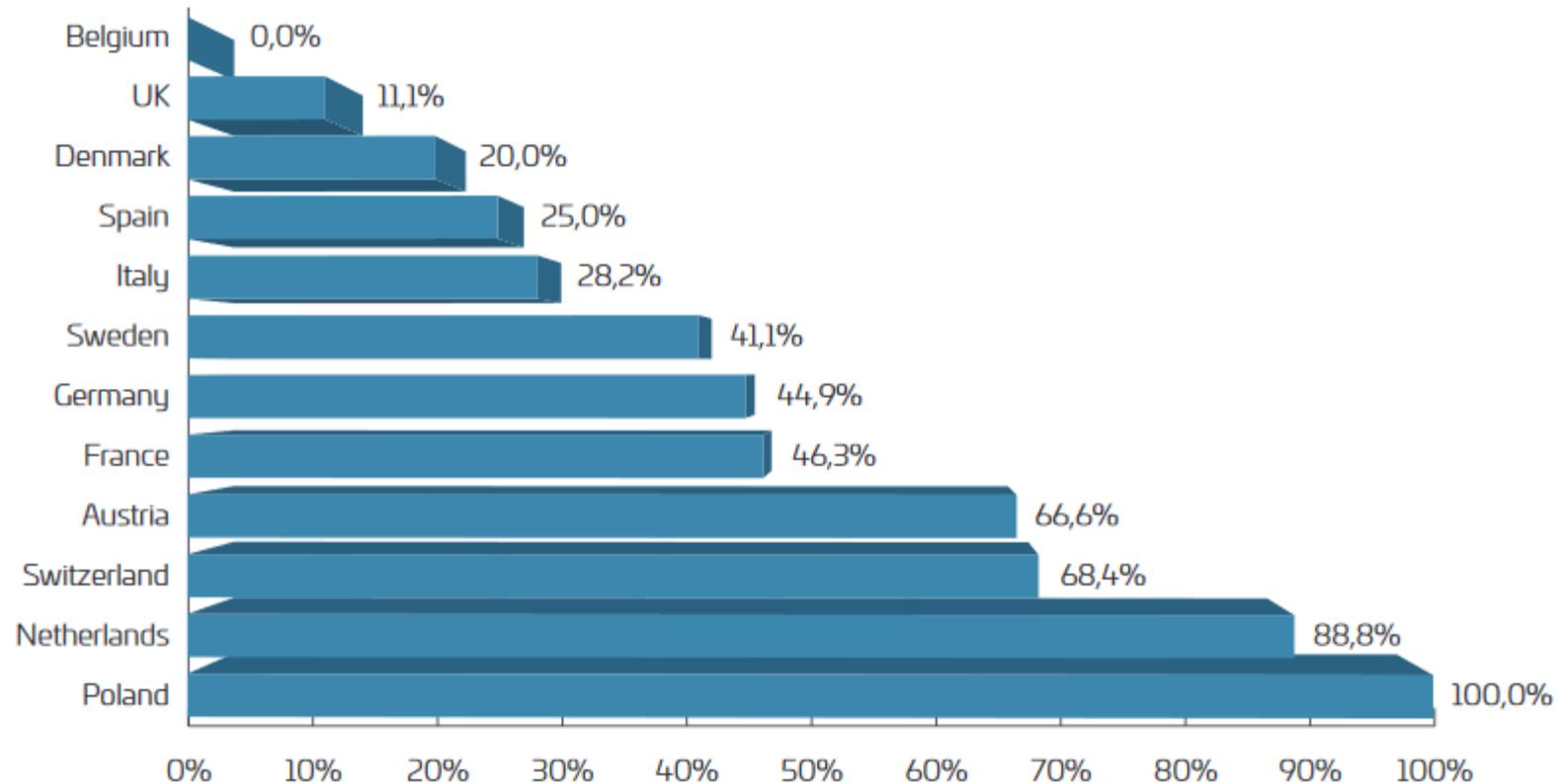
1. Exclusion from holdings in universe

Top Exclusions Criteria



1. Exclusion from holdings in universe

Tobacco Exclusions by Country



1. Exclusion mostly “combined”

Oxford university partners with BlackRock on sustainable tracker fund

Endorsement marks a first for a prestigious UK university endowment

Oxford university originally announced plans in April to divest its £4bn endowment from fossil fuels.

The latest move extends that policy to the university’s capital account, also managed by Oxford University Endowment Management, which will allocate an undisclosed amount into the new iShares Developed World Fossil Fuel Screened Equity Index fund.

The tracker will follow an MSCI index that excludes companies directly involved in fossil fuel exploration, extraction and production as well as those owning fossil fuel reserves. Companies associated with nuclear weapons, controversial weapons, civilian firearms, tobacco, thermal coal, tar sands and businesses that are not compliant with the United Nations Global Compact principles are also excluded from the new fund. It excludes a total of 153 companies that are constituents of the MSCI World index, its parent index.

“We have created a product with BlackRock that produces meaningful action to invest in a more sustainable way,” said Sandra Robertson, chief executive and chief investment officer of Oxford University EM.

2. Norms-based screening

“Norms-Based Screening (NBS) allows investors to select the companies in their portfolios in line with their level of compliance with international standards and norms”.

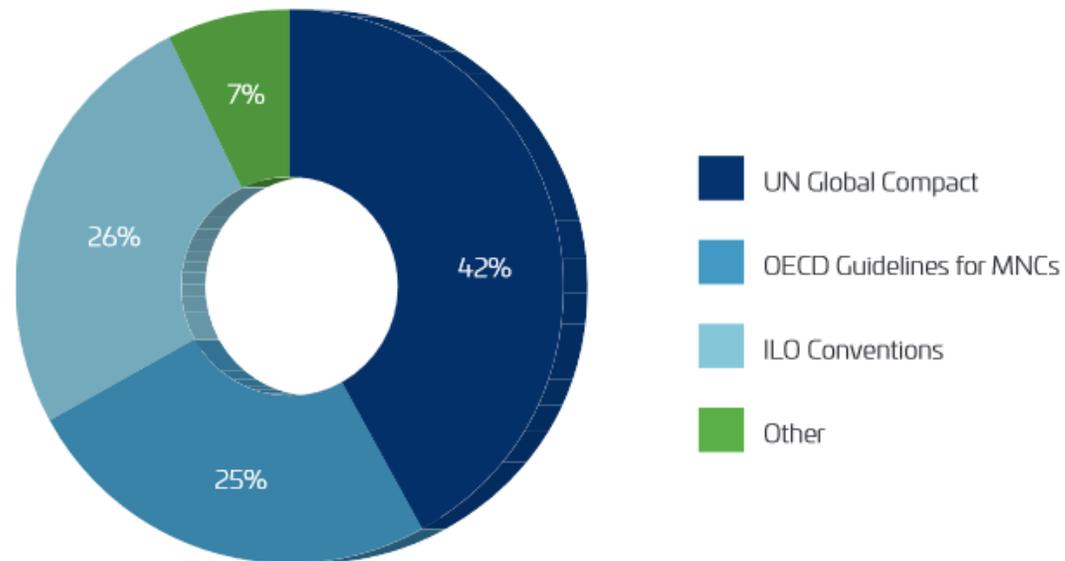
The Norms referred to focus on areas such as environmental protection, human rights, labour standards and anti-corruption principles, and are set out in international initiatives and guidelines such as the OECD Guidelines for Multinational Enterprises, the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, the UN Global Compact and, most recently, the Guiding Principles on Business and Human Rights”

Eurosif, 2018



2. Norms-based screening

Application of Norms as part of Norms-Based Screening



Allows integration of minimum standard of a certain definition of “good” and “responsible” behaviour.

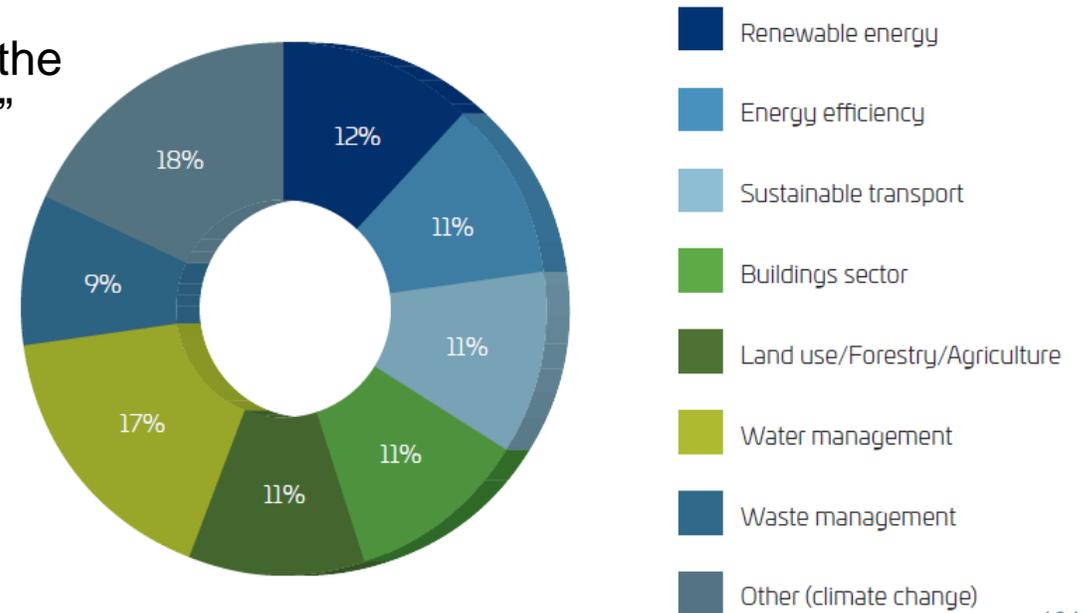
3. Sustainability themed investing



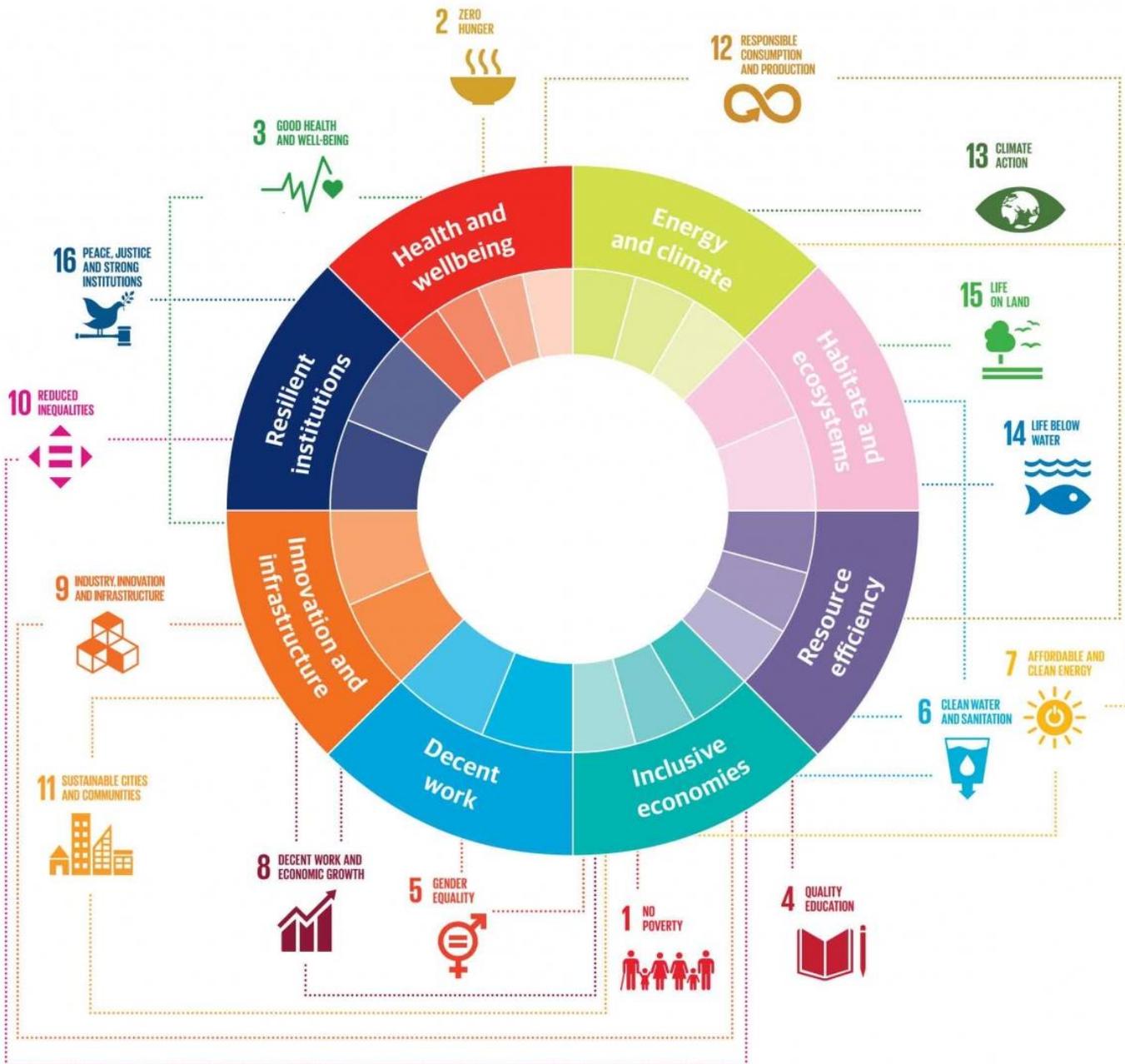
“This strategy translates into the selection of assets that are specifically related to sustainability in single- or multi-themed funds.

Observing the dynamics in themes, allows to measure the investors’ appetite for a particular area of sustainability.”

Eurosif, 2018



Sustainability-themed Investments



4. Best in class selection

“This strategy allows investors to pick those companies that have the **best ESG score in a particular industrial sector**.

Investors can choose the criteria, and the final score attained will be linked to the weighting of the criteria which may depend on the sector.

A Best-in-Class (BIC) portfolio typically includes companies that meet both an ESG and a financial evaluation. Other approaches that fall under a similar classification are Best-in-universe (BiU) and Best-effort”

Eurosif, 2018



Best in class selection



Simple to implement

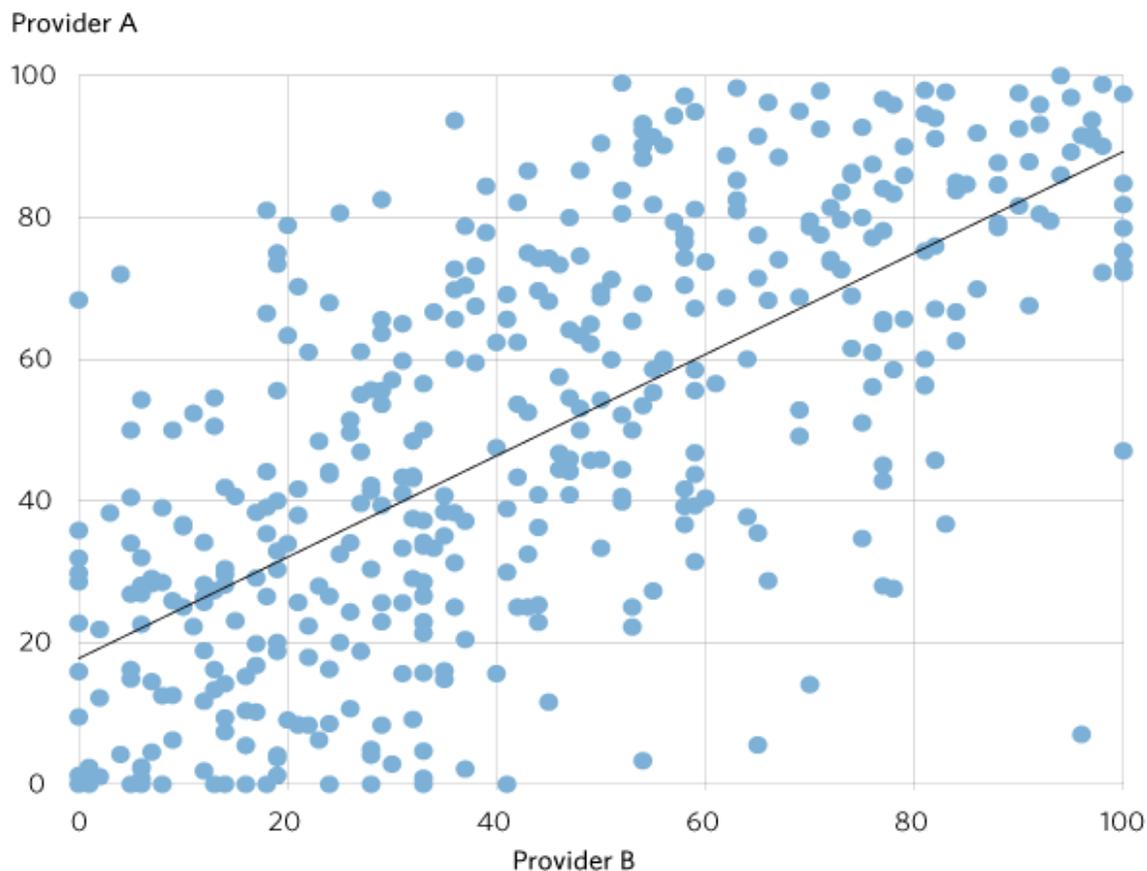
Risk-focussed

Over-reliant on ESG scores



Overtakes biases

ENVIRONMENTAL RANKINGS VARY WIDELY | U.S. COMPANY SCORES FROM TWO PROVIDERS



TWO PROVIDERS, TWO SCORES

Top 30% in one and
bottom 30% in the other

Seagate Technology

Philip Morris International

Verizon Communications

NRG Energy

Sempra Energy

Consolidated Edison

Duke Energy

General Motors

Conagra Brands

CMS Energy

NetApp

Marathon Oil

Tesla

Eaton Vance

Source: Third-party providers and Commonfund. Universe of 812 stocks from the Russell 1000 which both providers rank.

5. ESG Integration

“The explicit and systematic inclusion of ESG issues in investment analysis and investment decisions.

The analysis of all material factors in investment analysis and investment decisions, including environmental, social, and governance (ESG) factors.”

UN PRI, 2019

Includes:

- identifying material **financial factors and ESG factors**;
- Including ESG into the **fundamental analysis**;
- Making investment decisions that include **considerations of all material factors**, including ESG factors.
- Integration of ESG considerations in **active ownership**.





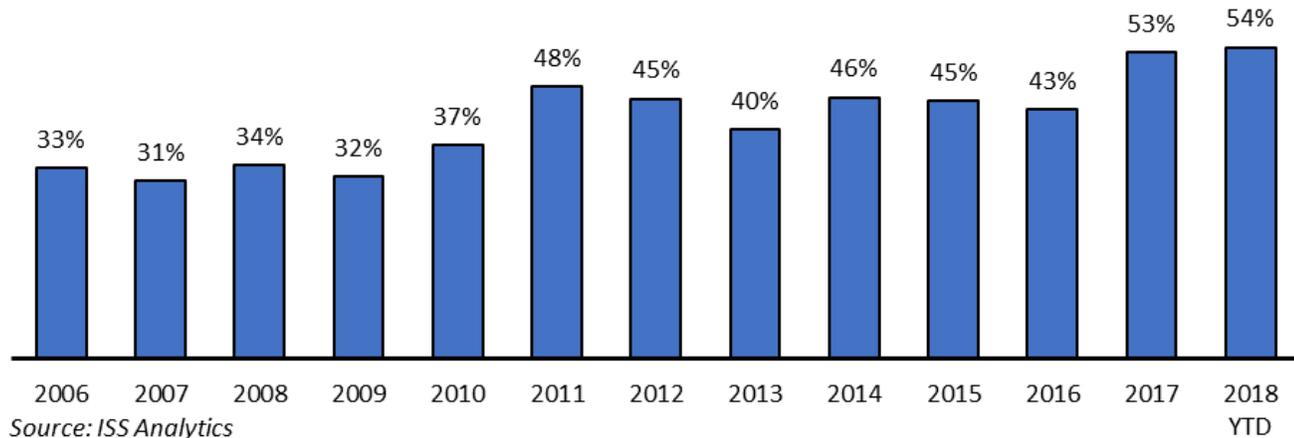
6. Engagement and Proxy Voting

Engagement pathways	Outreach tools	Communication tools	Investment tools	Escalation tools	Advocacy tools
Individual, reactive engagement	Quarterly calls	Q&A	Proxy Voting	Name and shame	Engagement with policy makers
Individual, proactive engagement	Standing calls	Clarification seeking	Group Voting	Divestment	Engagement with other stakeholders
	Meeting / call	Open discussion		Exclusion	
Collaborative engagement	Letters	Expectation sharing	Increase shares	Shareholder resolution	Public endorsements
	Questionnaires	Best-practice sharing	Invest	Strategic litigation	
	Roadshows	Target setting	Hold		
		Communicating feedback			

→ Notion of **Investor Stewardship**

More ESG Activism By Investors

E&S issues are now the subject of more than 50 percent of U.S. shareholder proposals
percentage of U.S. shareholder proposals relating to environmental and social issues
proposals submitted to companies, including withdrawals and omissions (as of August 10, 2018)



**ENGINE
NO.1**



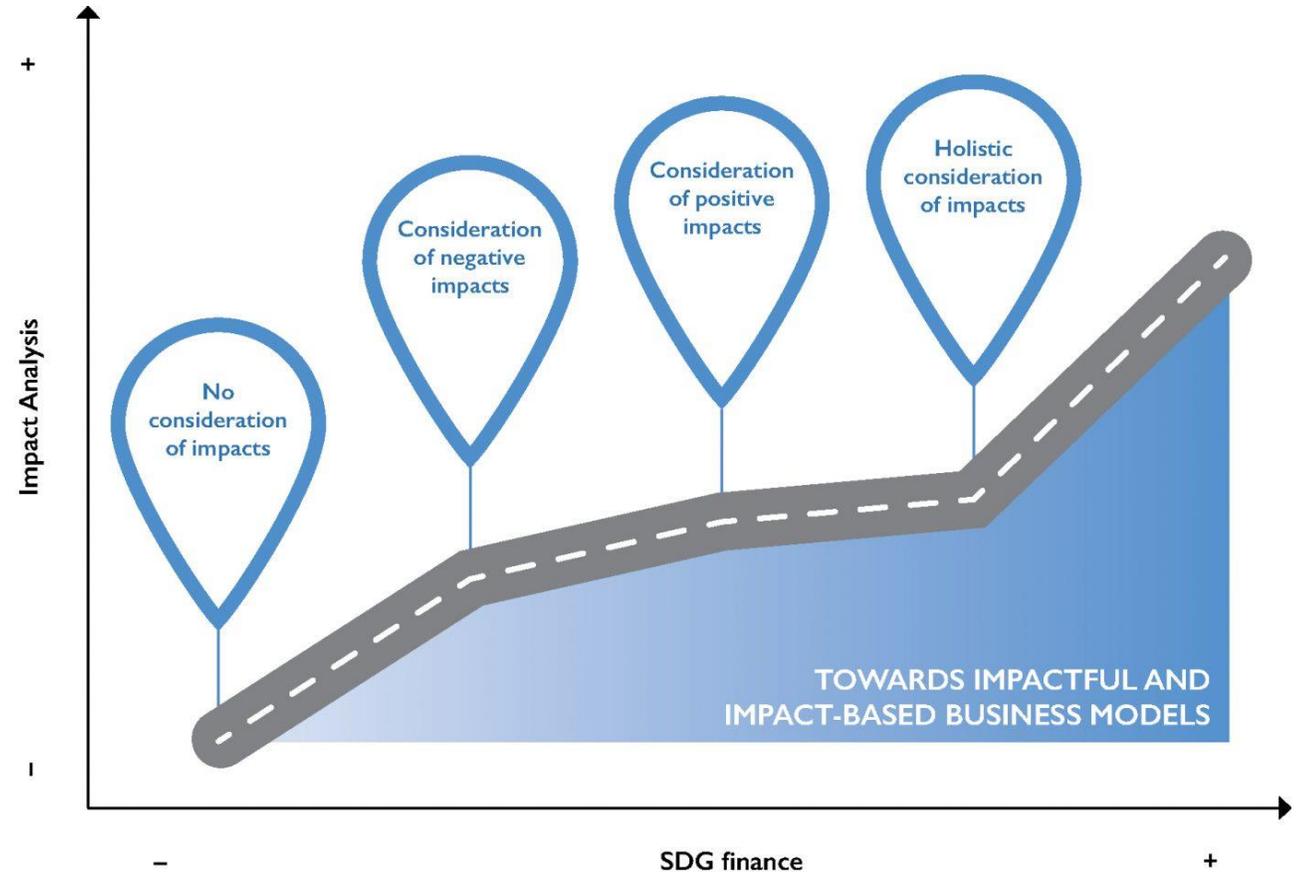
ShareAction»



7. Impact Investing

“investments made into companies, organizations, vehicles and funds with the intent to contribute to **measurable positive social, economic and environmental impact** alongside financial returns.”

GIIN / IFC, 2019



Elements of Impact

Term	Components
Significant change	<ul style="list-style-type: none">• Statistical definition• Relative to a baseline• Absolute amount
Positive or Negative	<ul style="list-style-type: none">• Defined by what (objective standard or relative standard)• Defined by whom (lived experience or stakeholder assessment)
Intended or unintended	<ul style="list-style-type: none">• Intended by whom, on what basis?• What was intended, on what basis?
Populations, systems, environment	<ul style="list-style-type: none">• Individuals (specific)• Groups (homogenous, heterogenous)• Purposeful, organized structures• Complex, inter-related structures
Beyond what otherwise may have occurred	<ul style="list-style-type: none">• “What would have happened anyway?”• Context-specific

Challenges of

→ **Additionality**

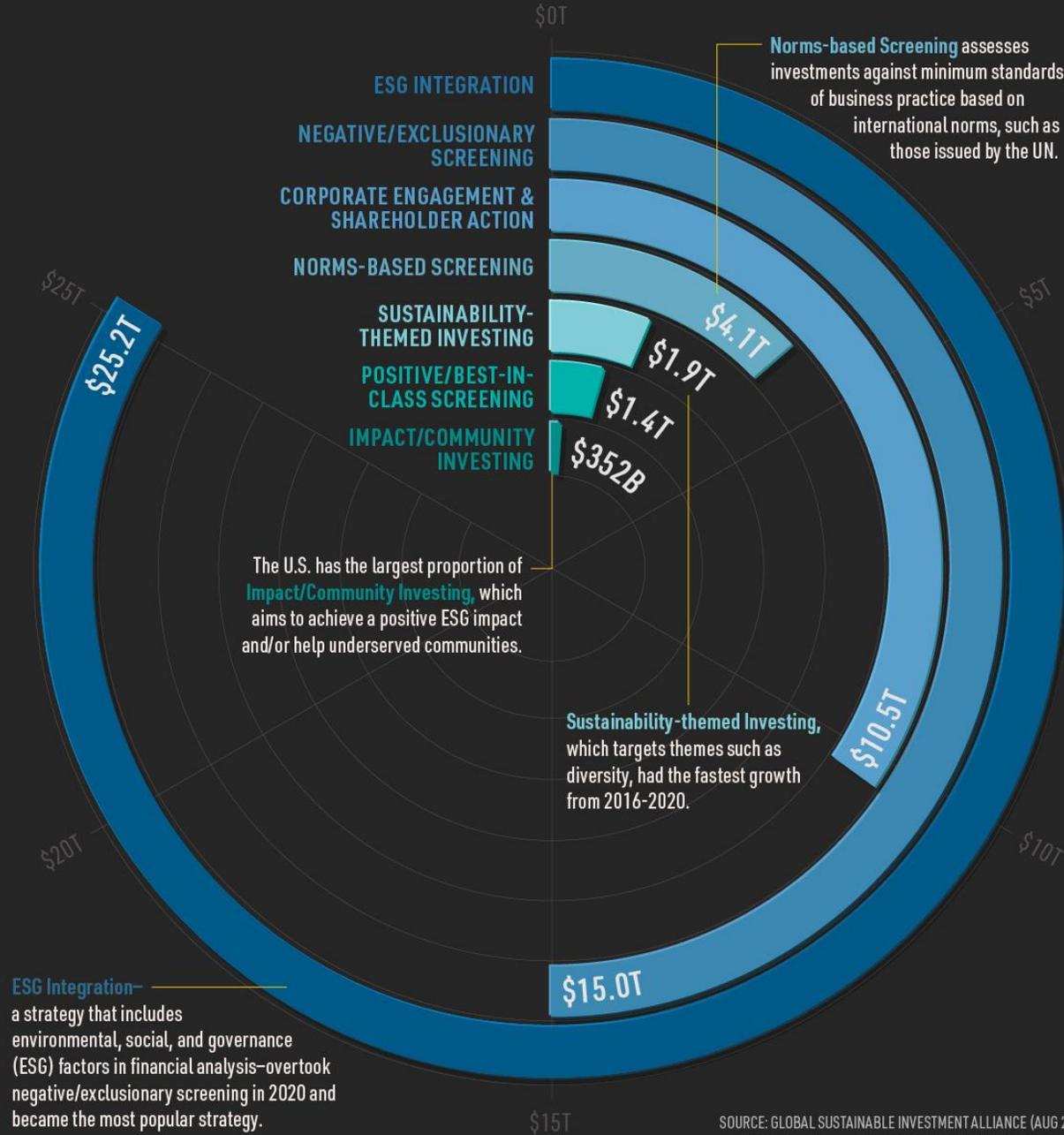
→ **Intentionality**

→ **Measurement**

Overview

ASSETS UNDER MANAGEMENT, 2020

¹SOURCE: MSCI (SEP 2021)



Norms-based Screening assesses investments against minimum standards of business practice based on international norms, such as those issued by the UN.

The U.S. has the largest proportion of **Impact/Community Investing**, which aims to achieve a positive ESG impact and/or help underserved communities.

Sustainability-themed Investing, which targets themes such as diversity, had the fastest growth from 2016-2020.

ESG Integration—a strategy that includes environmental, social, and governance (ESG) factors in financial analysis—overtook negative/exclusionary screening in 2020 and became the most popular strategy.

AGR
-3%

SOURCE: GLOBAL SUSTAINABLE INVESTMENT ALLIANCE (AUG 2021)

INTERNATIONAL INVESTMENT AGREEMENTS
REFORM ACCELERATOR



2020

FINALLY: STRATEGY NEEDS DIRECTION THE IMPORTANCE OF INVESTMENT POLICY

There are different “approaches” to ESG investing:

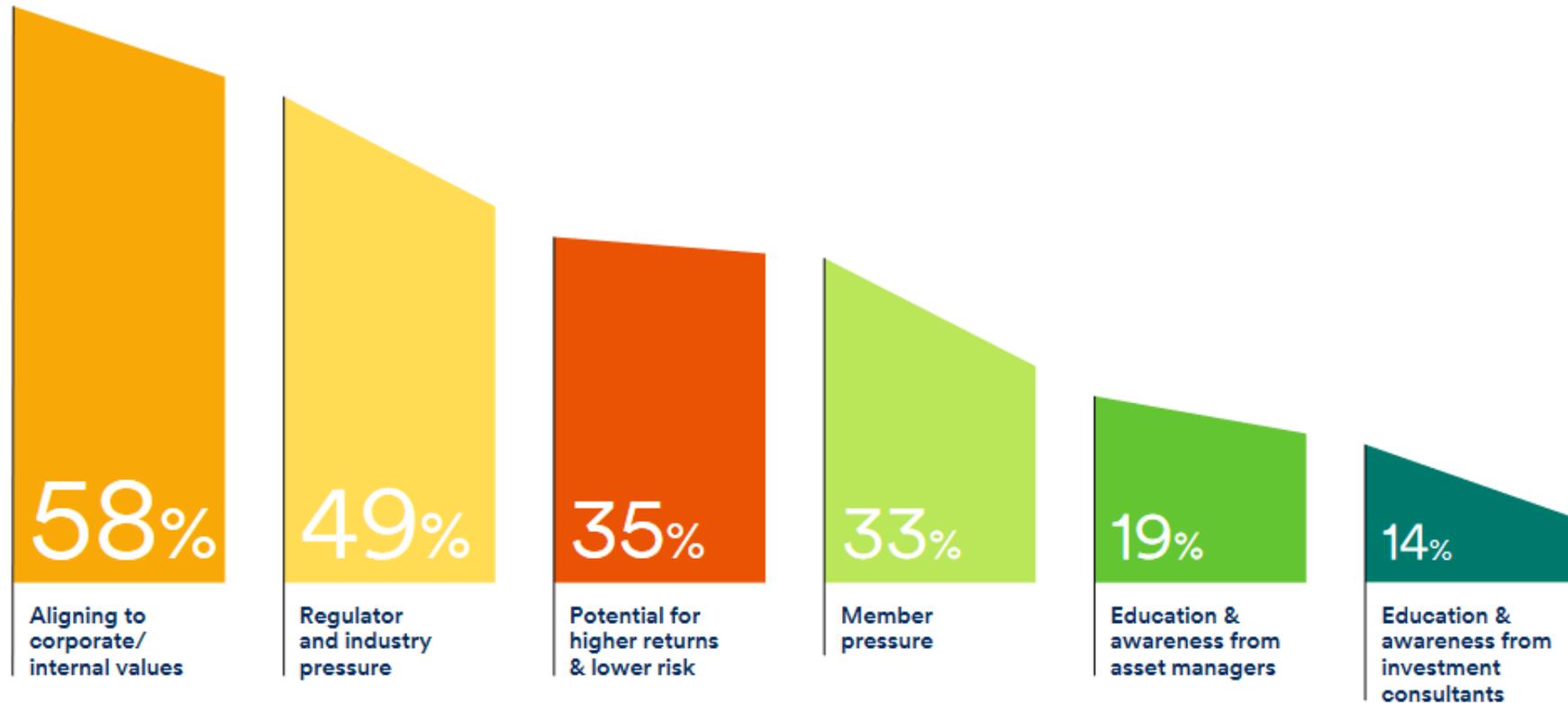
- Risk-focused
- Financial value seeking (value-focused)
- Normative / Ethical investing (SRI) (values-focused)
- Impact investing

May differ between investment products, but fundamentally **priorities** should be clear.

- **Statement of Investment Belief / SRI Policy**
- **Voting Policy**

The importance of Policy

What is driving your sustainability investment focus? Select all that apply



EXAMPLES AND CASES

R-Factor



Figure 1
**ESG Scores are Different
Across Providers**
(Cross Sectional Correlation
for Constituents of the MSCI
World Index, June 30, 2017)

	Sustainalytics	MSCI	RobecoSAM	Bloomberg ESG
Sustainalytics	1	0.53	0.76	0.66
MSCI		1	0.48	0.47
RobecoSAM			1	0.68
Bloomberg ESG				1

“Our approach to ESG data and scoring is guided by three goals:

- Bring greater **transparency to materiality** considerations that drive ESG scores
- Develop ESG scores that are based on **frameworks** supported by a large number of investors
- Promote **market infrastructure** that both integrates stewardship into ESG scoring and incentivizes greater corporate disclosure of investor-relevant ESG information”

R-Factor



R-Factor™ is an ESG scoring system developed by State Street Global Advisors that leverages multiple data sources and aligns them to widely accepted, transparent materiality frameworks to generate a unique ESG score for listed companies.

Benchmarking of environmental and social issues are “market-agnostic but industry specific”

whereas corporate governance issues are “industry-agnostic but market-specific.”

- Industry-specificity: SASB Materiality Map
- Market specificity: 16 governance specific market codes (and ICGN beyond those)

→ Data from three ESG data vendors (Sustainalytics, ISS ESG, and Vigeo-EIRIS) for E and S scores and ISS-Governance for G scores to construct scores for material issues.

R-Factor



R-Factor™ Principles:

1 Focus on materiality	2 Commonly Accepted, Transparent Frameworks	3 Multiple data sources	4 Strong Stewardship
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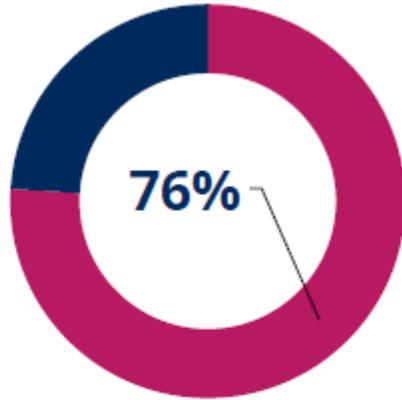
- Full integration into asset stewardship program.
- Screening of companies for voting and engagement based on their R-Factor scores.
- During engagements with portfolio companies, companies' R-Factor scores, as well as the underlying basis for those scores, are disclosed.

Goal:

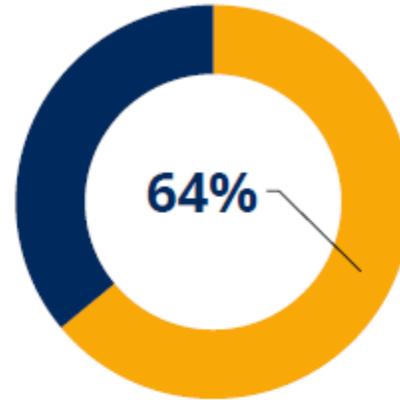
- Create roadmap for boards and management for the specific dimensions that investors are evaluating to assess a company's sustainability efforts.
- Help companies identify which metrics to disclose and manage to improve future scores, creating a positive feedback loop in the market

Stakeholder-focused investing

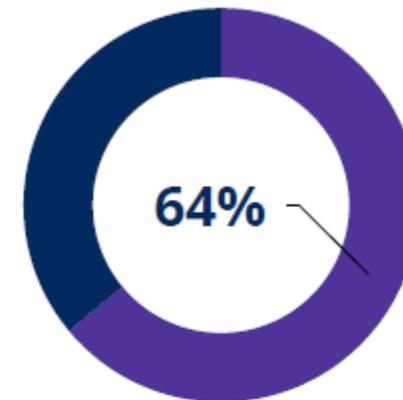
Schroders



of investors felt sustainable investing is more important than 5 years ago



have increased their allocation to sustainable investments over the past 5 years



Interested in sustainable investment funds e.g. climate change and good corporate governance

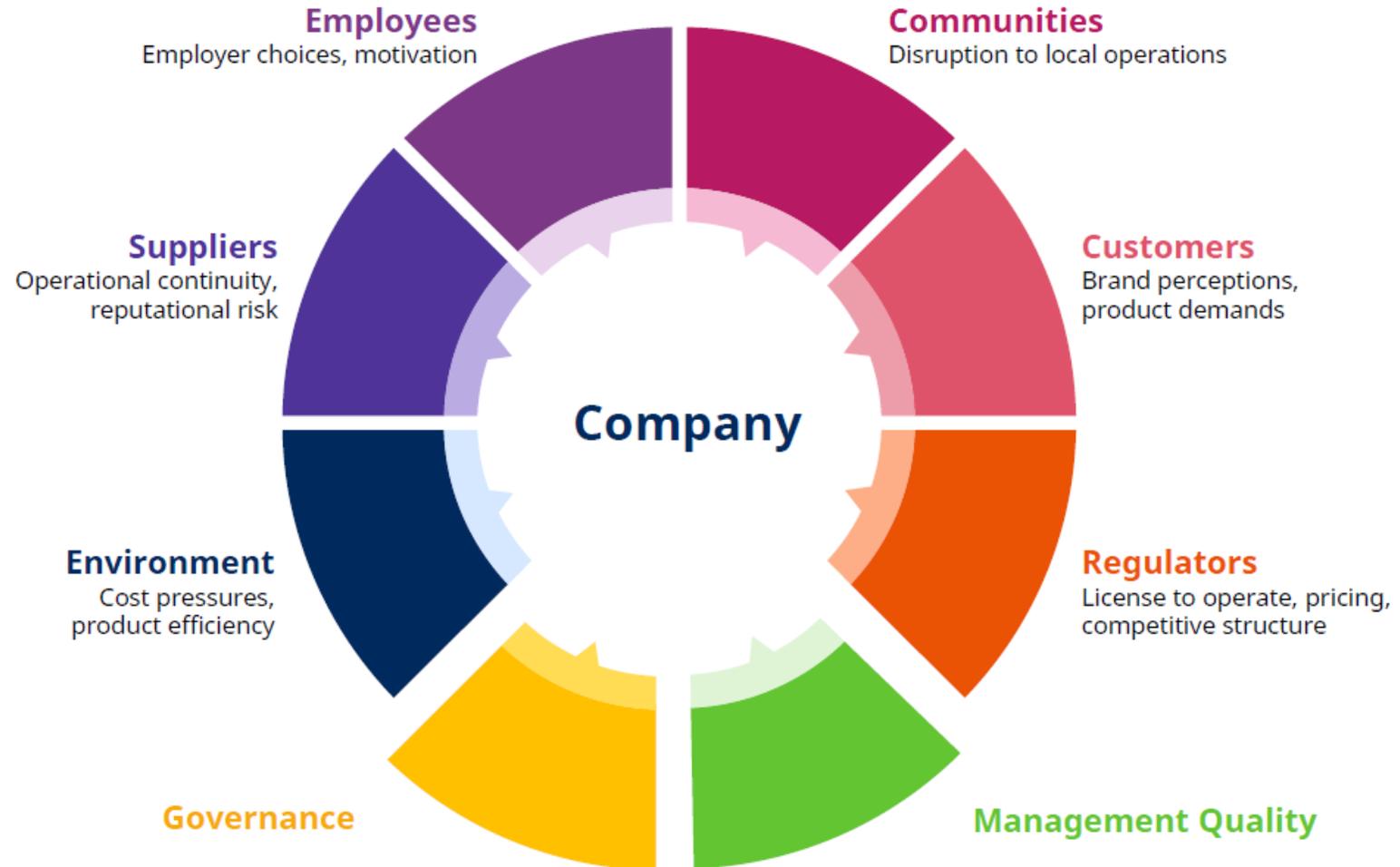


Stakeholder-focused investing

Schroders

CONTEXT

“Stakeholder analysis provides insights into managing change”



Stakeholder-focused investing

Schroders

CONTEXT



Themes

735 global ESG trends for 47 sub-sectors



Metrics

>200 data points
>50 sources



Companies

10,000 companies covered



Conventional data



Unconventional data



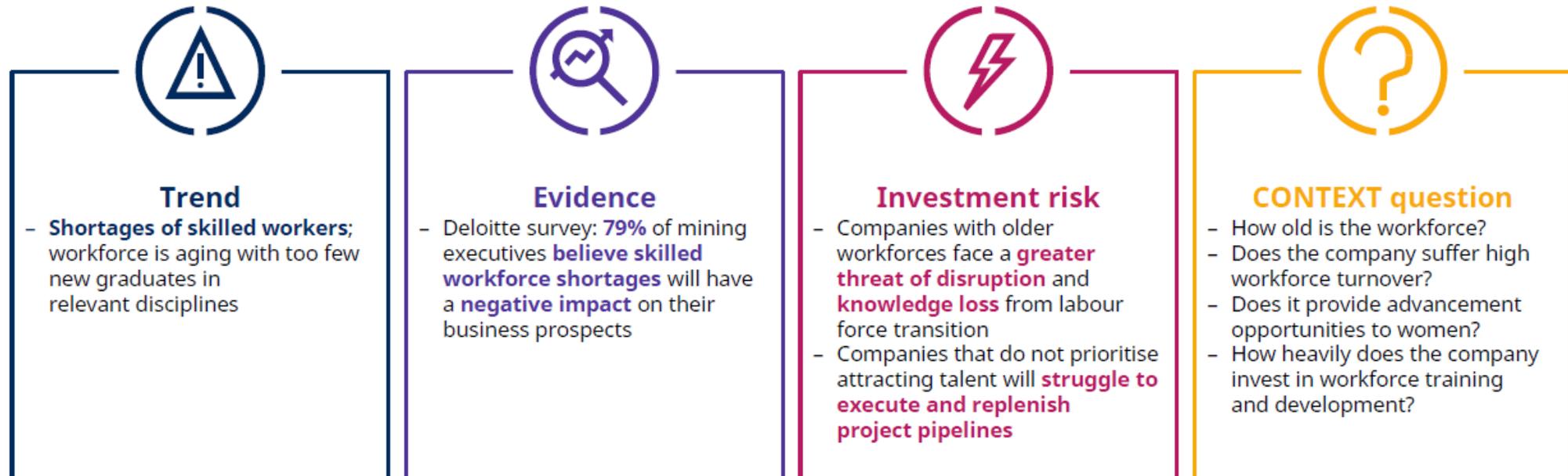
Stakeholder-focused investing

Schroders

CONTEXT

Mining sector example

Identifying structural trends and applying them to companies





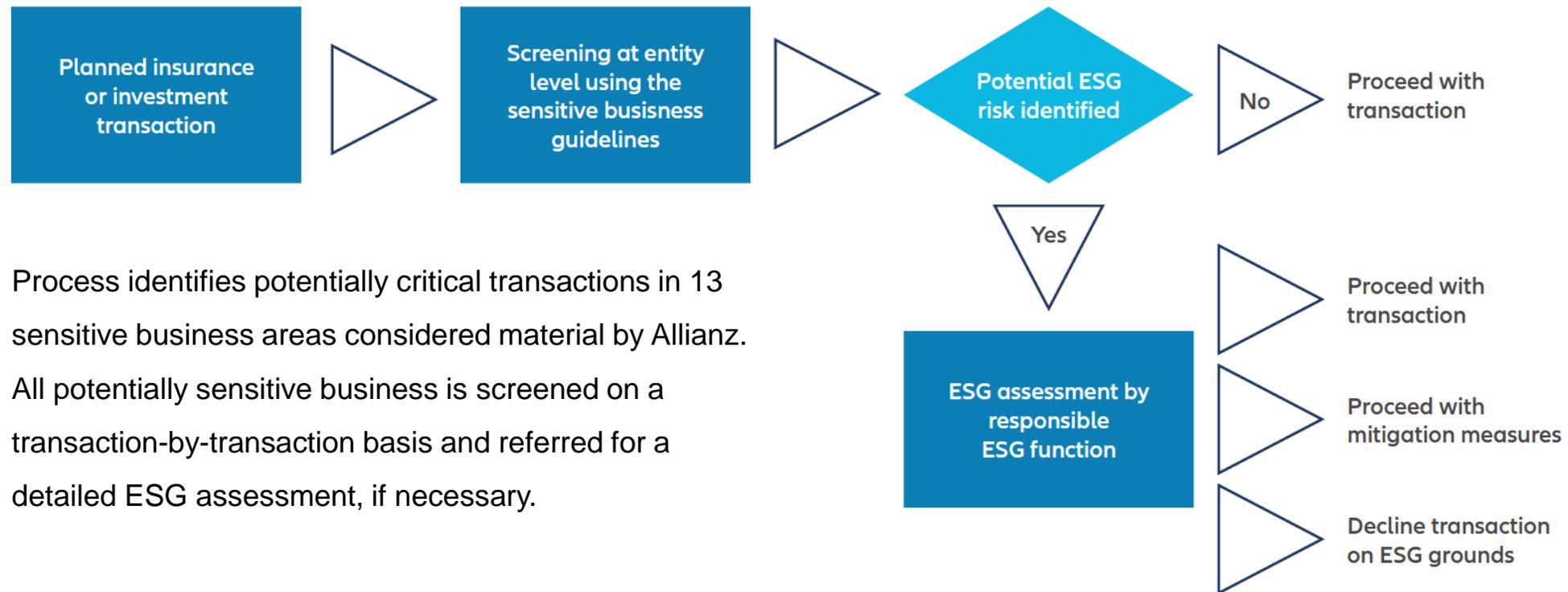
ESG in corporate standards and governance.

The **Asset Owner** perspective.

Table 1. ESG Processes across Allianz business lines

ESG Process	Internal Governance Document	Insurance	Proprietary Investments	
			Listed	Non-Listed
ESG Referral Process (03.3)	AS RRIM	•		•
ESG Sensitive Business Guidelines (03.4)	AS RRIM	•		•
Sensitive Countries List (03.5)	AS RRIM	•		•
ESG Scoring Approach (03.6)	EFRI		•	
ESG Engagement Approach (03.7.1)	EFRI		•	•
ESG Risk Dialogues (03.8)		•		
ESG Exclusion Policies (03.9)	AS RRIM, EFRI	•	•	•
Asset Manager Mandating, Selection and Review (03.10)	EFRI		•	•
ESG business opportunities (03.11)		•	•	•

Figure 1. ESG Referral Process flowchart



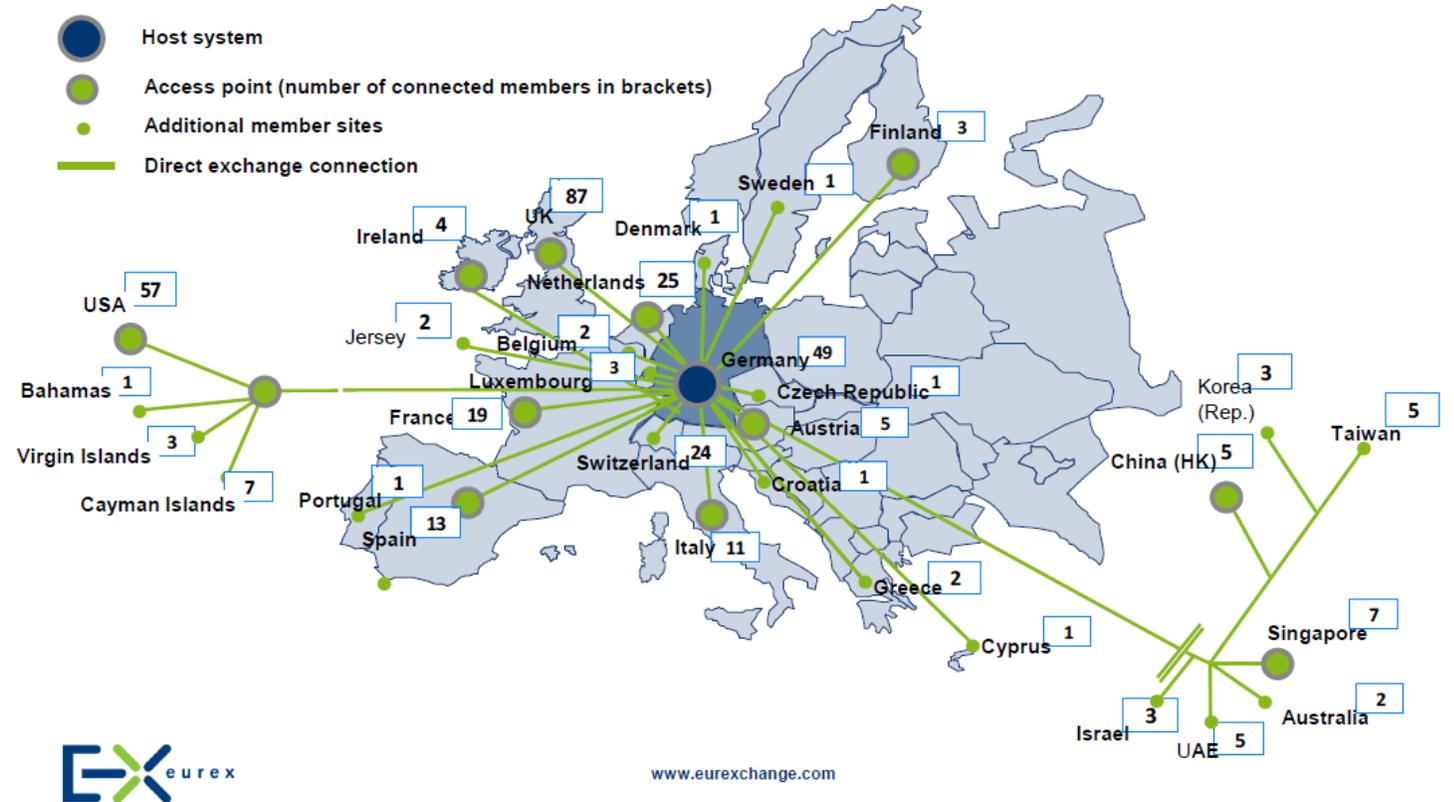
Process identifies potentially critical transactions in 13 sensitive business areas considered material by Allianz. All potentially sensitive business is screened on a transaction-by-transaction basis and referred for a detailed ESG assessment, if necessary.

- Avoids blanket exclusions
- Allows ESG risk assessment in each transaction

ESG in Index products

Most commonly used methods:

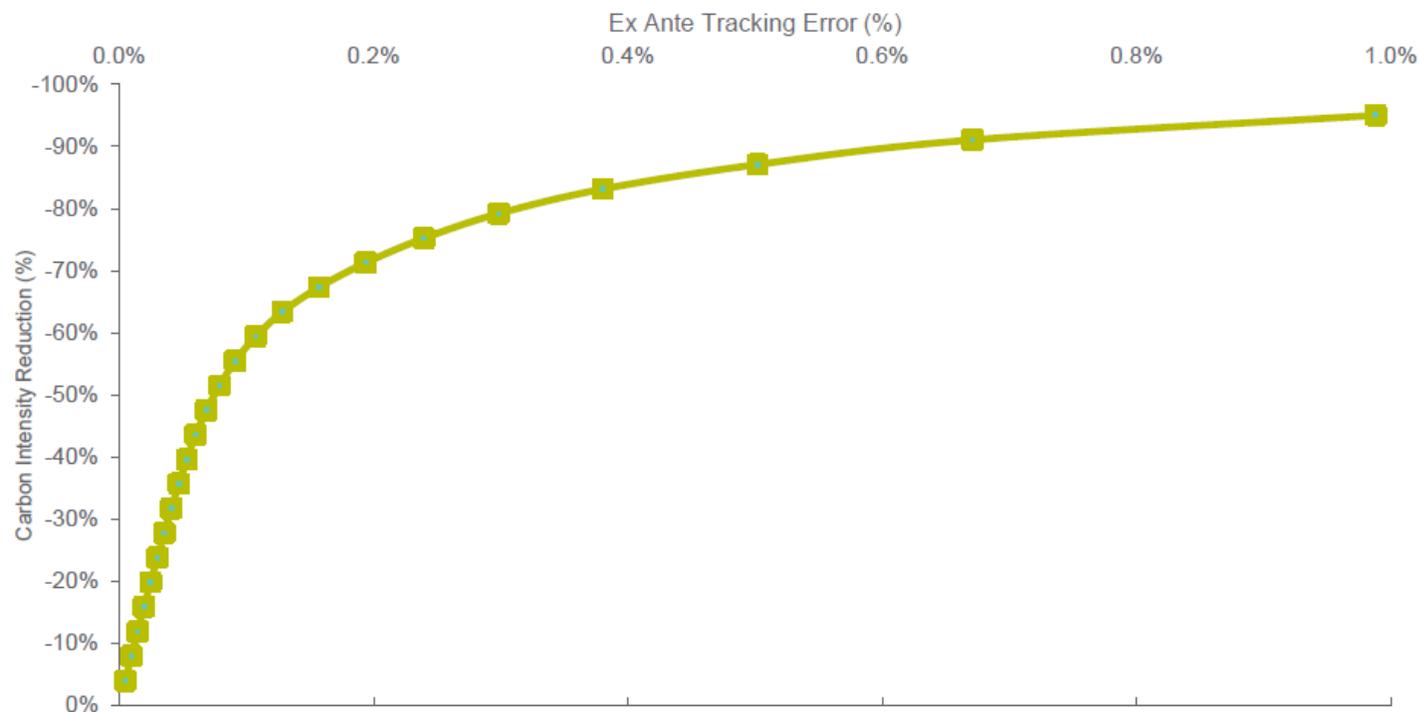
- Exclusion
- Negative or Positive Screening (BIC, BIU)
- ESG Tilting



ESG Index Funds

“Tragedy of the tracking error”

Higher ESG impact (in this example, carbon intensity) goes hand in hand with higher active risk (tracking error)



As of March 31, 2016. Source: Northern Trust, MSCI. For illustrative purposes, we create a frontier of 25 portfolios that each minimizes tracking error for a given level of Carbon Intensity reduction (starting with zero reduction and ending with 95% reduction. No other constraints were applied.

ESG Index Funds

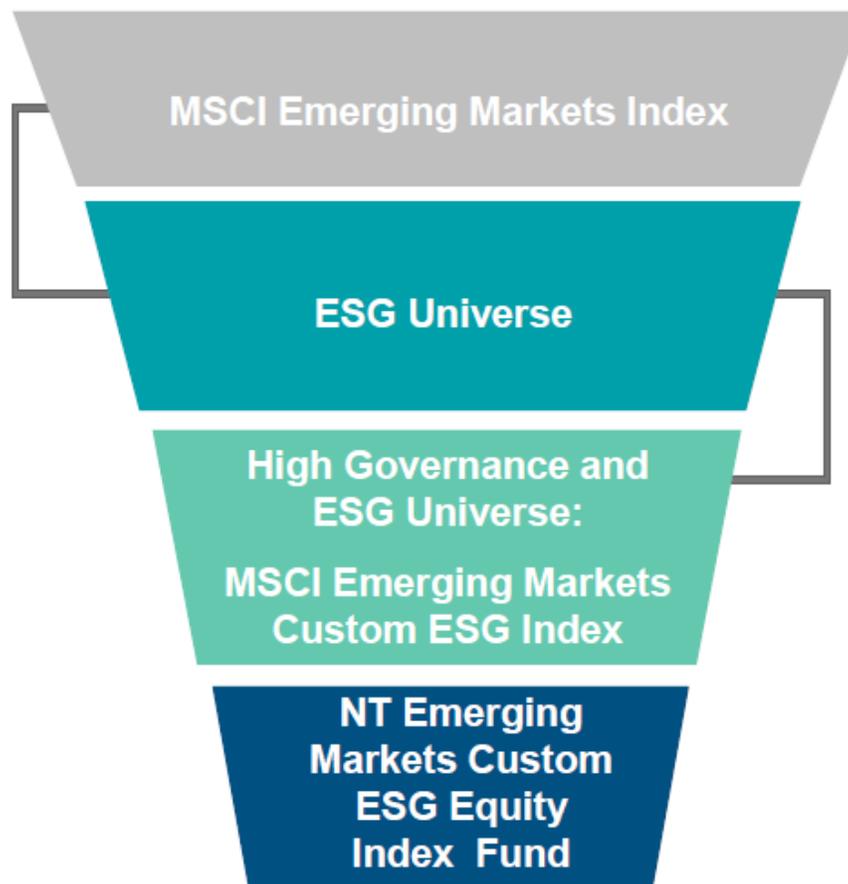


Solution 1: LOW TRACKING ERROR: NT EM CUSTOM ESG EQUITY INDEX FUND

Approach: Ethical and Norms-Based exclusions aiming to align with investors' values plus governance filters aiming to capture key risks

Custom ESG Screens

- Controversial Weapons
- Tobacco
- Conventional Weapons & Civilian Firearms*
- UN Global Compact 10 Principles



Custom Governance Screens

- 30% or more owned companies
- Less than 50% Independence of the Board
- Less than 50% Independence of the Audit and Remuneration committees
- Qualified Auditor Opinions

Applied together

No of co's	Tracking error
1,038	0.75%

Data as rebalancing in Q4, 2018. MSCI EM has 1,128 securities

* These exclusion factors are in the process of being added. Target date – February 2019

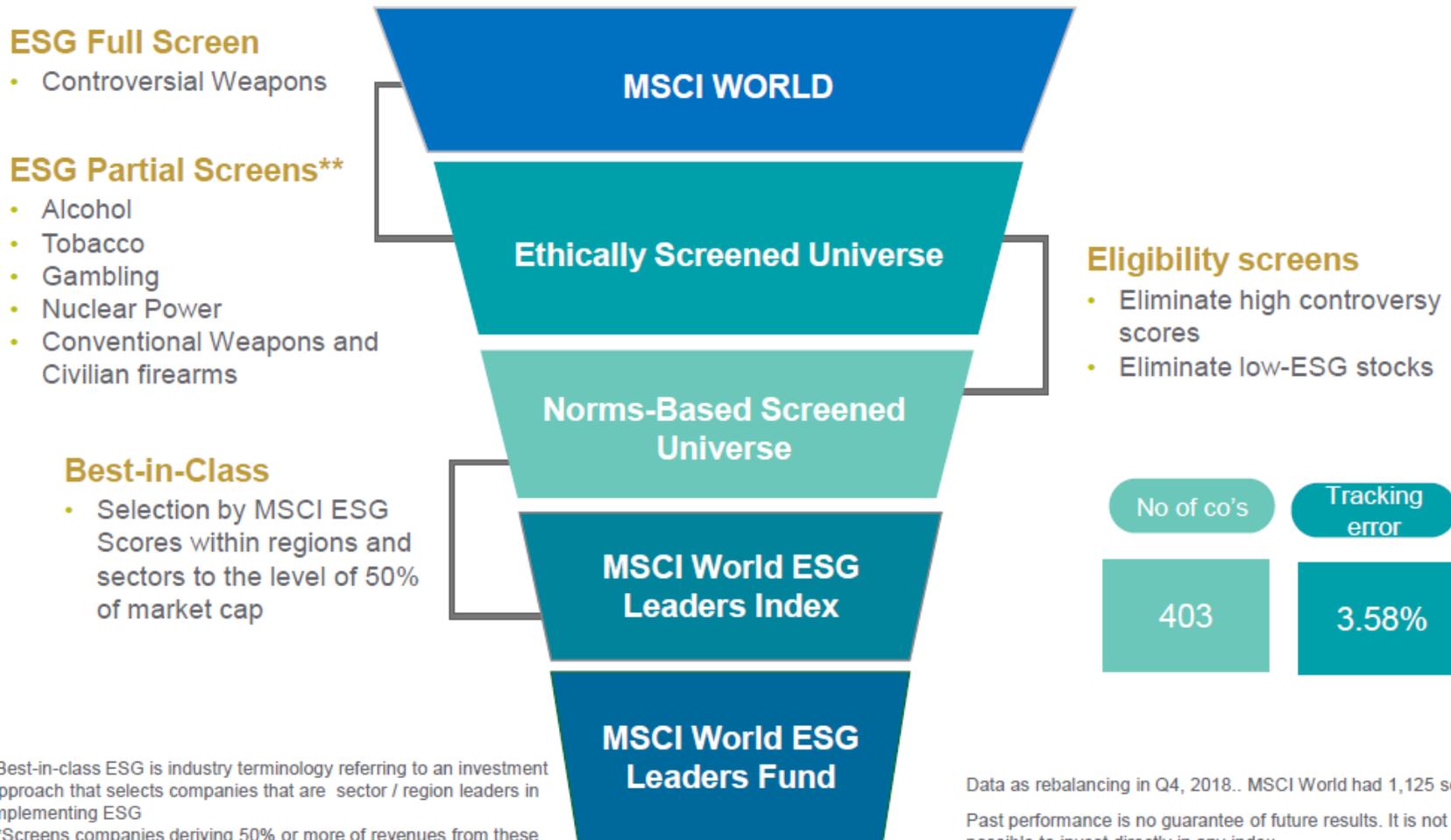
Past performance is no guarantee of future results. It is not possible to invest directly in any index.

ESG Index Funds



Solution 2: MEDIUM TRACKING ERROR: NT EM ESG LEADERS EQUITY INDEX FUND

A sustainability Best-in-Class* approach integrated with ESG exclusion screens



*Best-in-class ESG is industry terminology referring to an investment approach that selects companies that are sector / region leaders in implementing ESG
 **Screens companies deriving 50% or more of revenues from these business activities

Data as rebalancing in Q4, 2018.. MSCI World had 1,125 securities
 Past performance is no guarantee of future results. It is not possible to invest directly in any index

ESG Indexing

Strong demand for ESG Derivatives on STOXX benchmarks

Client feedback

- Strong demand for ESG versions of STOXX benchmarks
- Focus on liquidity and lower cost of trading ESG indices
- Keep it simple
- Similar risk-return profile as STOXX benchmarks
- Tier-1 ESG data provider (e.g./ Sustainalytics, CDP)
- Aligned with upcoming EU Commission regulation
- Easy to implement

Market participants Europe



Product specific feedback

- Asset managers are looking for an “ESG compliant” version of STOXX® Europe 600 with “standardized” set of exclusions (UN Global compact, controversial weapons, tobacco and coal)
- Insurance companies showed strong interest in a low carbon version of EURO STOXX 50®
- Positive feedback on STOXX Europe 600® aligned with “positive carbon impact benchmark” definition EU commission

ESG Indexing

STOXX® Europe ESG futures

Low Carbon & Climate Impact index futures - Investable access to ESG derivatives

I. STOXX® Europe 600 ESG-X

- ESG screened version of Europe's key benchmark index futures: STOXX® Europe 600 (FXXP)
- Eurex Future on STOXX® Europe 600 ESG-X provides a new tool to the ESG market with the ambition to increase liquidity and lower the cost of trading

III. STOXX Europe Climate Impact Index

- Next generation of Low Carbon indices
- Evaluates companies progress towards transitioning to low carbon economy
- Addressing climate risks with additional ESG screens: UN Global Compact, Controversial Weapons, Tobacco, Coal

II. EURO STOXX 50® Low Carbon

- Low Carbon version of EURO STOXX 50®
- Eurex Future on EURO STOXX 50® Low Carbon provides a new tool for asset managers to reduce climate risks

I. STOXX® Europe 600 ESG-X futures

Risk and return overview

Risk and return characteristics ¹⁾²⁾		
	STOXX® Europe 600 ESG-X	STOXX® EUROPE 600
Return (overall)	7.5%	7.3%
Return 1y	-10.5%	-10.3%
Return 3y	3.8%	4.0%
Return 5y	4.4%	4.4%
Volatility, 1y	13.1%	13.0%
Volatility 3y	14.5%	14.4%
Volatility 5y	15.7%	15.7%
Sharpe Ratio (overall) ³⁾	0.56	0.55
Max. Drawdown (overall)	-25.05%	-24.93%
Tracking error (overall)	0.50%	
Number of Constituents	579	600

Index performance¹⁾



1) Source: STOXX, EUR GR daily data, 19.03.2012 to 08.01.2019.

2) Annualised: returns, volatility, Sharpe ratio and tracking error figures used. Relative figures calculated against STOXX EUROPE 600 Index. Overall: 19.03.2012 to 08.01.2019; 1y: 08.01.2018 to 08.01.2019; 3y: 08.01.2016 to 08.01.2019; 5y: 08.01.2014 to 08.01.2019.

3) EONIA rate used as proxy for riskless returns.

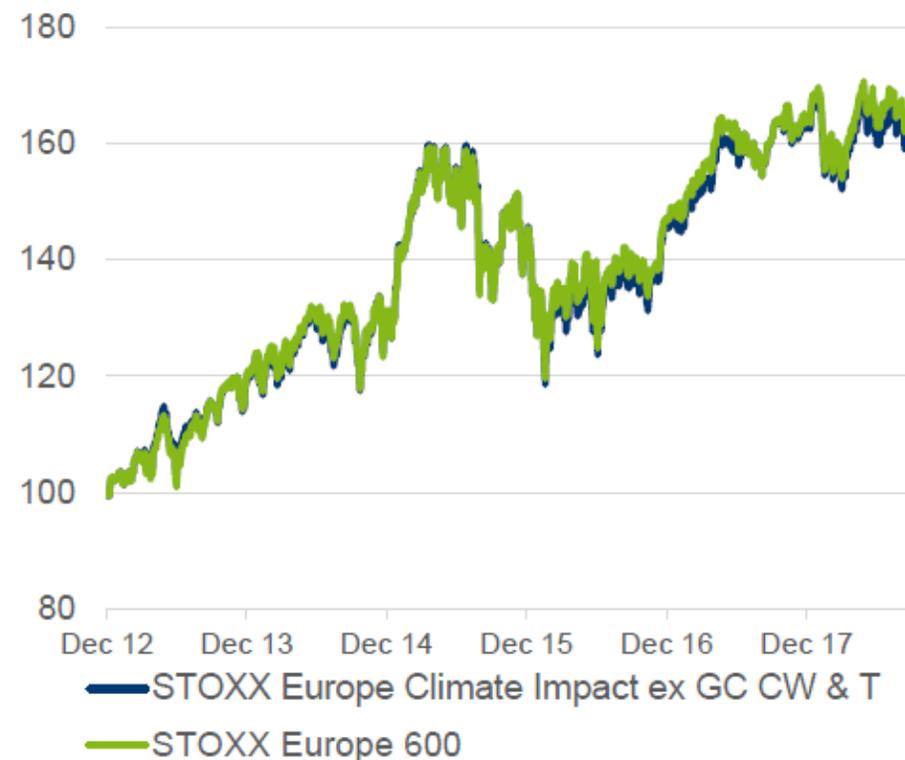
II. STOXX Europe Climate Impact Index futures

Risk and return overview

Risk and return characteristics¹⁾²⁾

	STOXX Europe Climate Impact Ex GC, CW & Tob	STOXX Europe 600
Return (overall)	7.1%	7.1%
Return 1y	-9.7%	-10.3%
Return 3y	4.0%	4.0%
Return 5y	4.5%	4.4%
Volatility 1y	12.6%	13.0%
Volatility 3y	14.4%	14.4%
Volatility 5y	15.7%	15.7%
Sharpe Ratio (overall)	0.54	0.54
Max. Drawdown (overall)	-25.8%	-24.9%
Tracking error (overall)	1.6%	
Number of Constituents	262	600

Index performance¹⁾



The STOXX Europe Climate Impact index has a 53.3% lower carbon footprint than the STOXX Europe 600 index

1) Source: STOXX, EUR GR daily data, 24.12.2012 to 08.01.2019.

2) Annualised: returns, volatility, Sharpe ratio and tracking error figures used. Relative figures calculated against STOXX Europe 600 Index. Overall: 19.12.2011 to 08.01.2019; 1y: 08.01.2018 to 08.01.2019; 3y: 08.01.2016 to 08.01.2019; 5y: 08.01.2016 to 08.01.2019.

3) EONIA rate used as proxy for riskless returns.

III. EURO STOXX® 50 Low Carbon future

Risk and return overview

Risk and return characteristics ¹⁾²⁾		
	EURO STOXX 50 Low Carbon	EURO STOXX 50
Return (overall)	9.6%	8.9%
Return 1y	-13.7%	-12.7%
Return 3y	3.8%	4.0%
Return 5y	3.4%	3.3%
Volatility 1y)	14.2%	14.0%
Volatility 3y	16.4%	16.1%
Volatility 5y	18.3%	18.1%
Sharpe Ratio (overall) ³⁾	0.59	0.56
Max. Drawdown (overall)	-27.72%	-27.82%
Tracking error (overall)	0.96%	
Number of Constituents	50	50



The EURO STOXX 50® Low Carbon index has a 63.8% lower carbon footprint than the EURO STOXX 50® index.

1) Source: STOXX, EUR GR daily data, 19.12.2011 to 08.01.2019.

2) Annualised: returns, volatility, Sharpe ratio and tracking error figures used. Relative figures calculated against EURO STOXX 50 Index. Overall: 19.12.2011 to 08.01.2019; 1y: 08.01.2018 to 08.01.2019; 3y: 08.01.2016 to 08.01.2019; 5y: 08.01.2014 to 08.01.2019.

3) EONIA rate used as proxy for riskless returns. www.eurexchange.com

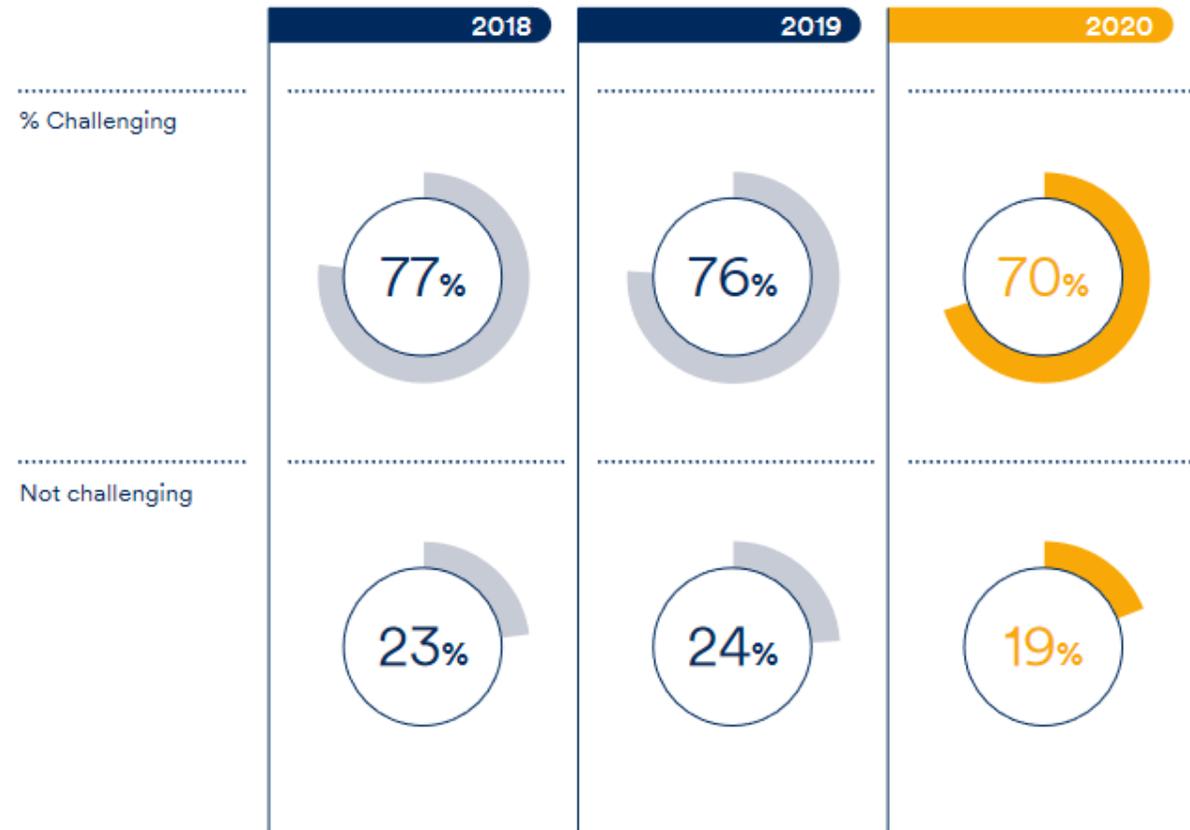
ESG Indexing – useful?

- Cost-efficient access to liquid benchmarks
- Some of these show a risk-return profile and reduced tracking error compared to their parent index
- Adapted solutions for asset managers with strict mandates to align with ESG requirements
- Adapted solutions for index investors and easy integration into existing trading infrastructure

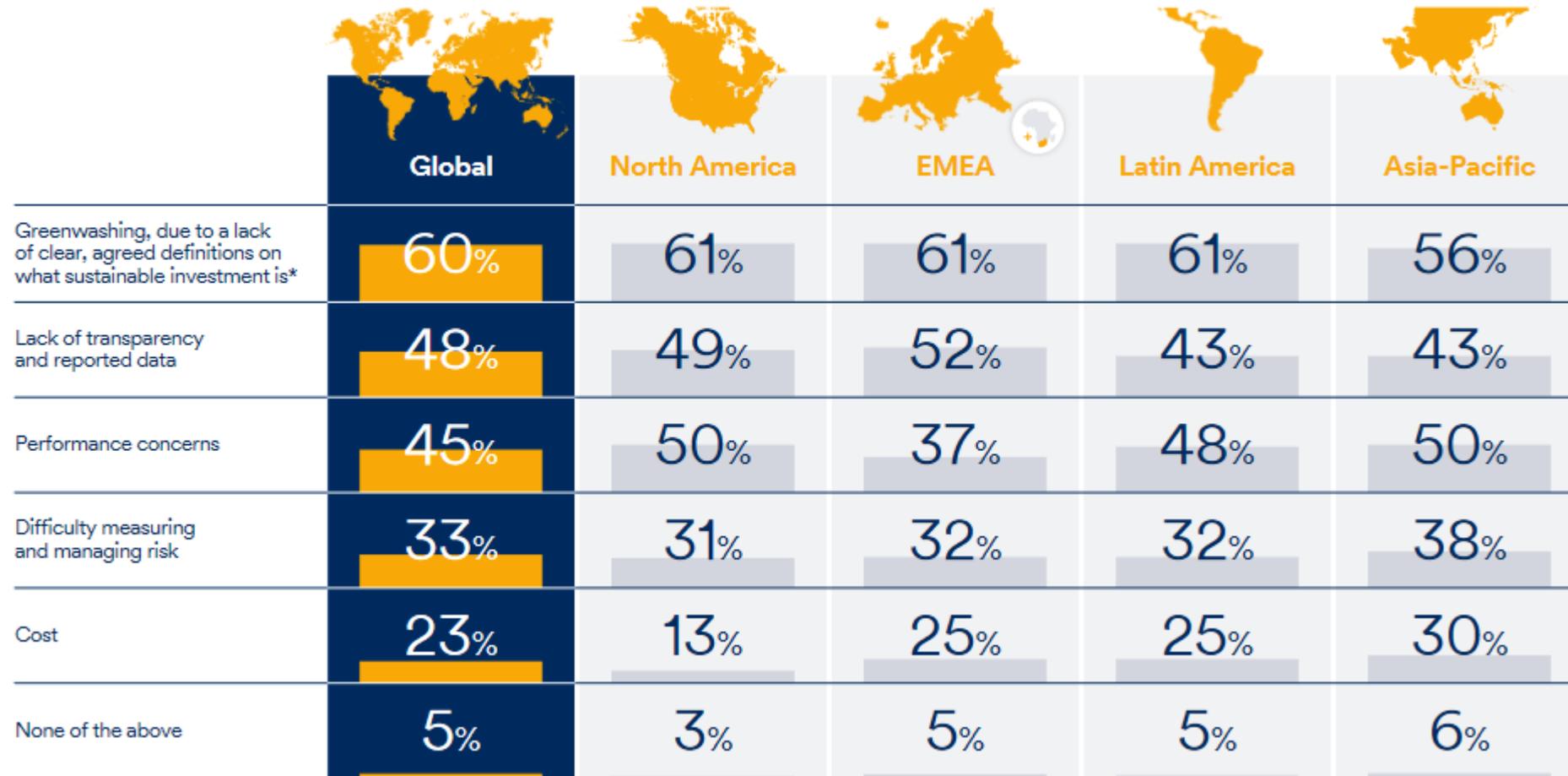
But

- Not ESG Integration
- Alignment pre-defined, not customary
- Opt-in version, not Opt-out
- The start, not the solution

ESG INVESTING IS A JOURNEY



Main concerns from investors...



Fixed Income

CREDIT MARKETS

Integrating ESG in Fixed Income Analysis

Why?

- Can reduce idiosyncratic and portfolio downside risk → [Main focus currently](#)
 - Helps anticipate and avoid investments that may be prone to credit rating downgrades, widening credit spreads, and price volatility.
 - ESG as long-term potential tail risks that can be offset by thinking about ESG
- Can improve portfolio performance

Difference to ESG in public equities:

- [Process and logic of the fundamental analysis are very similar.](#)
- [But what matters to a bond holder may differ from what matters to a shareholder, so the outcome of the analysis may differ.](#)
- [Data challenges: Issuers are often subsidiaries of companies in core ratings.](#)

ESG in Fixed Income - PATHWAYS

INTEGRATION

- Fundamentally, a forward looking analysis (not just Markowitz' historical risk-and-return)
- Assessing creditworthiness and producing internal credit rating forecasts.

ENGAGEMENT

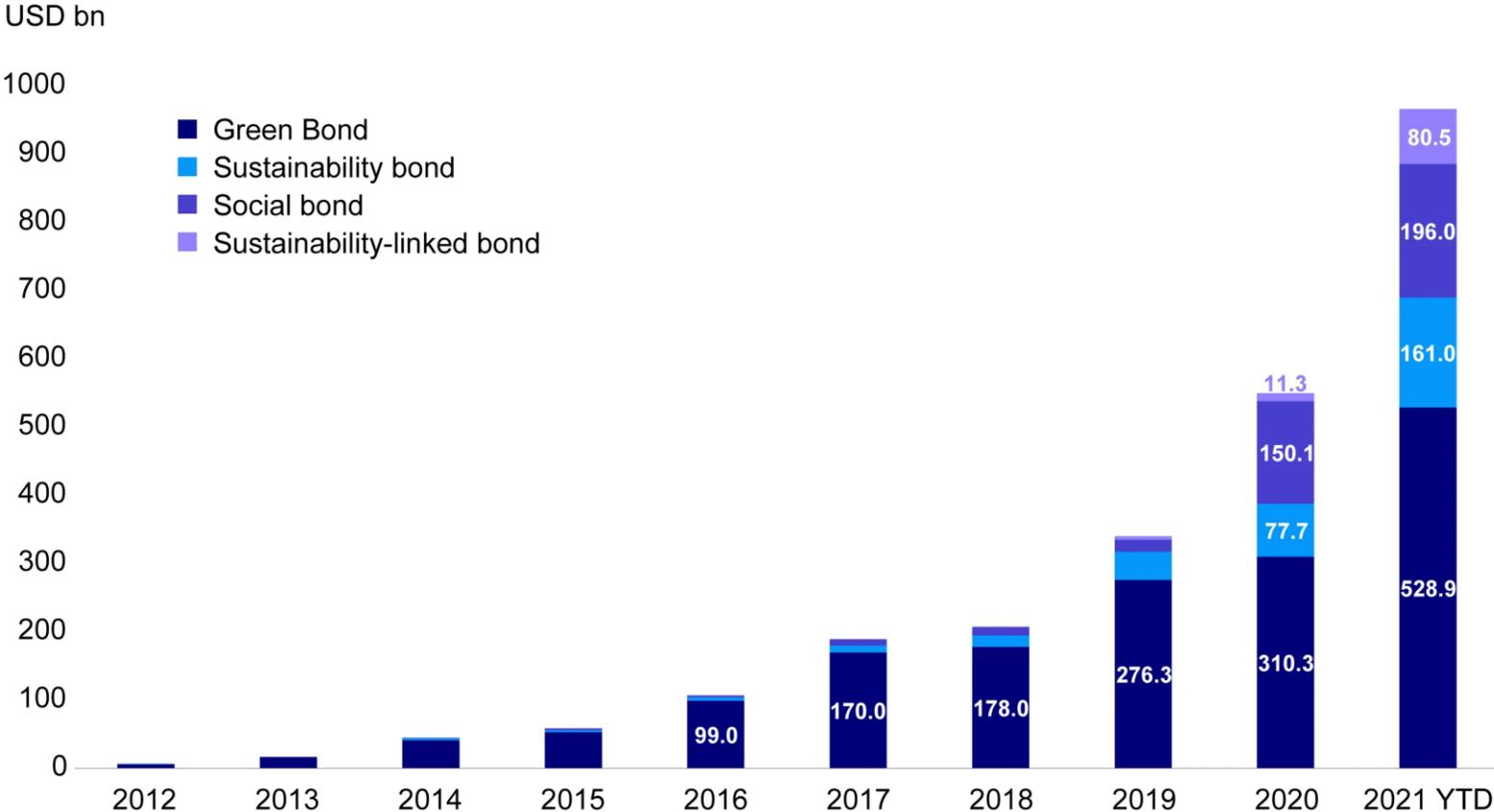
- Enquiring information from management beyond financials to understand ESG shortcomings (i.e. risks) and instrument specific risks.
- Engage on shortcomings to judge willingness to address these issues.

NEGATIVE SCREENING

- Use external ESG providers to complement and benchmark
- Using exclusions and best-in-class to define “investable” universe

BRANDED PRODUCTS

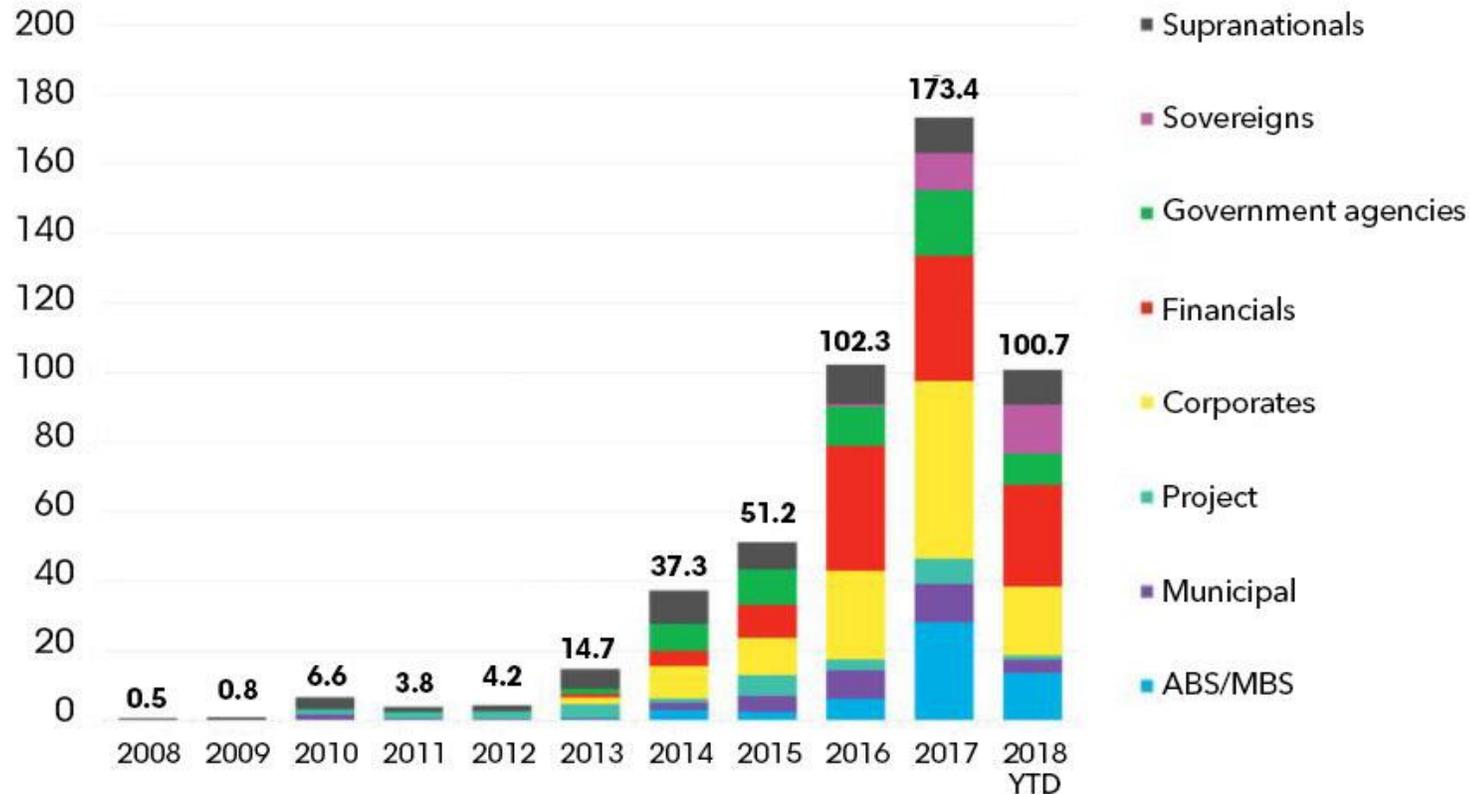
Issuance of “branded” bonds including ESG



<https://www.invesco.com/apac/en/institutional/insights/fixed-income/esg-labelled-bonds-growth-on-track-for-2022.html>

Green Bonds across issuers

Annual green bond issuance by issuer/bond type



Source: Bloomberg NEF

ESG may be interesting not only from a private debt, but also from a sovereign and emerging market debt perspective.

BUT, likely more challenging because engagement is less likely in sovereign than it is in credit.

On the EM side, the quality of the data on E&S presents additional challenges.

Corporate Bonds including ESG considerations

GREEN BOND: funding projects that contribute to environmental sustainability (i.e. finance wind farm)

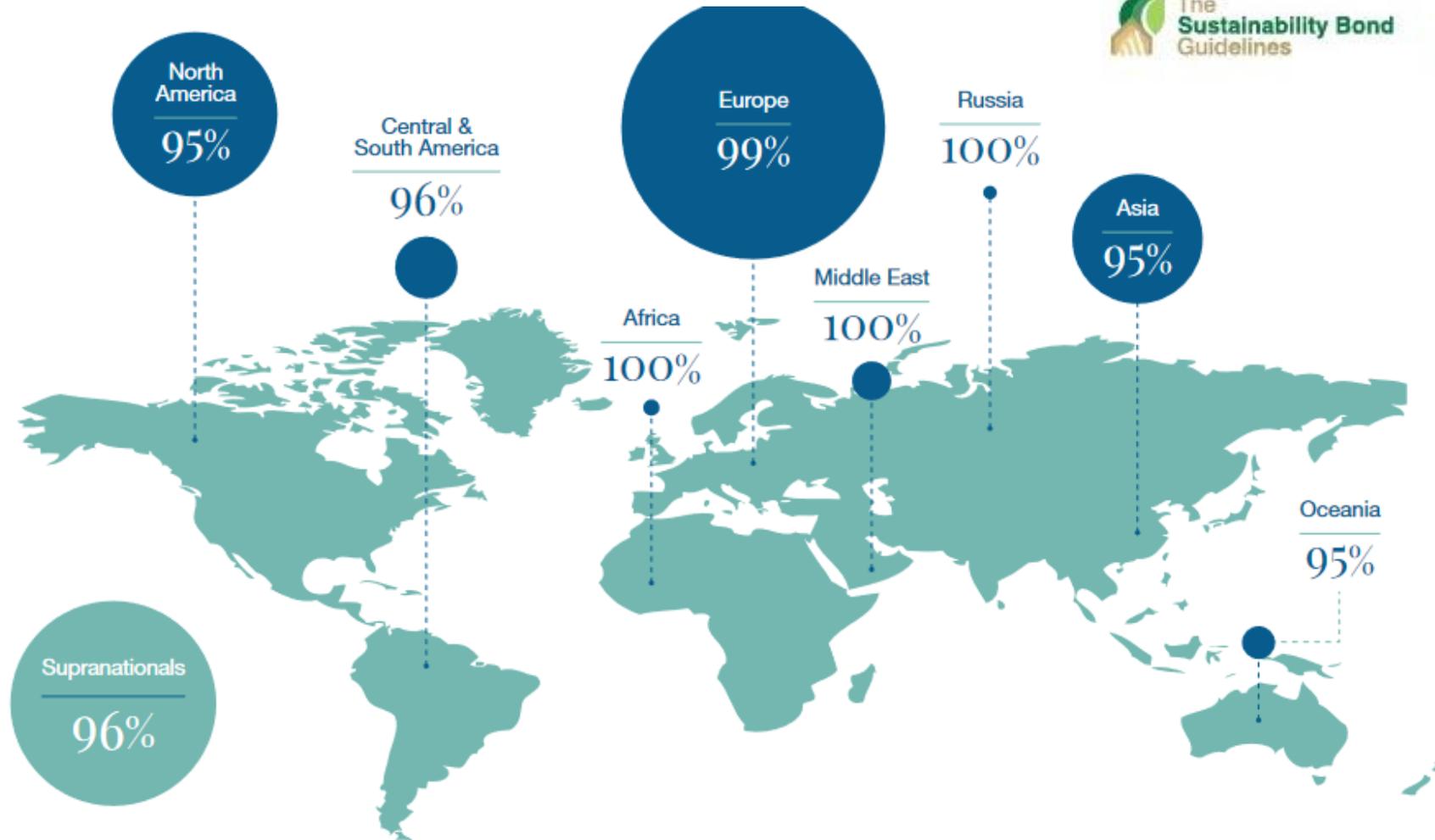
SOCIAL BOND: funding new/existing projects that address or mitigate a specific social issue and/or seek to achieve positive social outcomes

TRANSITION BOND: an issuer's financing program supports the implementation of its climate change strategy (i.e. helps reduce CO2, not necessarily fully "green").

SUSTAINABILITY LINKED BOND: the financial/structural characteristics change depending on whether the issuer achieves predefined Sustainability/ ESG objectives (i.e. coupon steps).

SUSTAINABILITY BONDS: finance a combination of both Green and Social Projects

Corporate Bonds including ESG considerations



International Capital Market Association (ICMA): the [Green Bond Principles \[PDF\]](#)

- The funds will be used for **green projects** that will have a beneficial effect on the environment.
- The issuer of a green bond must transparently notify the investors of the **environmental sustainability goals**, allowing for them to be **assessed and externally reviewed**.
- The funds management will be appropriately and transparently controlled by the issuer, which will allow an **auditor** to perform a complementary review.
- The issuer of this type of bonds **will periodically update the information about how the funds are used** and the environmental benefits obtained.
- Most recently, **alignment with the principles of the European Union taxonomy** to drive private investment in sustainable growth and to contribute economically to a neutral climate economy is included as standard for issuing green bonds in the EU.

Green Bonds

- Issuance of **green bonds**
 - Bonds whose proceeds are committed to finance environmental and climate-friendly projects
 - E.g., renewable energy, green buildings, resource conservation, etc.
- **The market infrastructure is still in its infancy, although many developments are under way.**
 - International Capital Market Association (ICMA) Green Bond Principles – a voluntary code focused on the use of proceeds, the procedure for project evaluation and selections, management of proceeds, and reporting.
 - The EU Green Taxonomy
- **Emerging system of verifiers and assurance providers who examine process and environmental integrity.**



Green Bonds

Geographical spread
(all GB 2013-2017)

Panel A. Corporate green bonds by industry

Industry	Amount (\$B)
Financials	46.0
Banking	40.2
Real estate	5.9
Industrials	67.3
Utilities	21.8
Power generation	18.7
Transportation and logistics	8.0
Renewable energy	4.0
Forest and paper products manufacturing	3.3
Communications equipment	2.5
Waste and environment services and equipment	2.5
Automobiles manufacturing	2.2
Food and beverage	1.2
Travel and lodging	0.8
Consumer products	0.7
Managed care	0.6
Electrical equipment manufacturing	0.5
Others	0.5
Total	113.4

Panel B. Corporate green bonds by country

Country	Amount (\$B)
France	25.1
China	14.7
Netherlands	14.3
United States	14.1
Mexico	8.0
Germany	6.5
India	4.3
Spain	3.4
Australia	3.3
Austria	2.4
Brazil	1.9
Sweden	1.9
Italy	1.8
Canada	1.7
Denmark	1.7
Britain	1.3
Japan	1.2
Singapore	1.1
Chile	1.0
Costa Rica	1.0
South Korea	1.0
Others	1.6
Total	113.4

Green Bonds

Are on the rise. Yet very little is known about this financial innovation:

- Effect on firm-value
- Effects on environmental performance

Flammer (2018) event study (regression discontinuity) that shows:

- Firm value and profitability (ROA) increasing significantly following the issuance of corporate green bonds
- Environmental performance (as rated by Asset4) goes up by 8% in the long-term
- The issuance of green patenting (no of green as ratio of total patents) increase by 3,4%
- Long-term orientation (LT-Index) increases by 4,9%
- Ownership-effect: long-term investors and green investors increase slightly (1,5% and 3%)

Sustainability Bonds

ALPHABET

Alphabet issues sustainability bonds to support environmental and social initiatives

Aug 3, 2020. Today, as part of a \$10 billion debt offering, we have issued \$5.75 billion in sustainability bonds, the largest sustainability or green bond by any company in history. Although a number of companies have issued green bonds (directed solely to environmental uses), sustainability bonds differ in that their proceeds support investment in both environmental and social initiatives. Such bonds are an emerging asset class and we hope this transaction will help develop this new market. We're encouraged that there was such strong demand for these bonds from investors—they were significantly oversubscribed.

- Energy efficiency
- Clean energy
- Green buildings
- Clean transportation
- Circular economy and design
- Affordable housing
- Commitment to racial equality
- Support for small business and COVID19 response

“At record low yields” Washington Post
(0.8%/7 yrs.; 1,.1%/10 yrs.; 2.25%/40 yrs.)

SDG Bonds

ENEL LAUNCHES THE WORLD'S FIRST "GENERAL PURPOSE SDG LINKED BOND", SUCCESSFULLY PLACING A 1.5 BILLION U.S. DOLLAR BOND ON THE U.S. MARKET

- *Enel Finance International NV has placed on the capital market the world's first bond linked to the achievement of a sustainable objective, part of the Group's corporate strategy and in line with Enel's commitment to achieving the Sustainable Development Goals ("SDGs") of the United Nations*
- *The issue was almost three times oversubscribed, with orders of about 4 billion US dollars. The strong demand from investors for the "General Purpose SDG Linked Bond" once again confirms the appreciation and confidence of the financial markets in the soundness of the Enel Group's sustainable strategy and the consequent impact on the economic and financial results*



Rome, September 6th, 2019

Guidance on SDG Impact

<https://sdgimpact.undp.org/sdg-bonds.html>

7 AFFORDABLE AND CLEAN ENERGY



SDG 7
"Affordable and clean energy", with 12€Bn of Capex on Renewables and over 11.6GW of additional capacity

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



SDG 9
"Industry, innovation and infrastructure" with 11€Bn on power grid infrastructure, over 46.9mn smart meters and 5.4€Bn of Digital Capex on innovation and digitalization across the Company

11 SUSTAINABLE CITIES AND COMMUNITIES



SDG 11
"Sustainable cities and communities" with over 2€Bn Capex for retail power and new electrification-oriented energy services to reach, among others, 9.9 GW of demand response and 455k charging points for eMobility

13 CLIMATE ACTION



SDG 13
"Climate action" for the commitment on climate action and the reduction of its power mix's carbon intensity to <0,345kg/kWheq in 2021 and 0,230kg/kWheq in 2030, which ultimately includes the previous direct actions

Open Question:

Are “branded” bonds a useful tool of incentivizing green / sustainable capital allocation of firms at a lower cost of capital, or are they just greenwashing?

→ Comes down to **Additionality**:

Is the firm doing something that it would have not done anyway?
Does the financing enable activities otherwise delayed / avoided?

→ Comes down to **Intention**:

Is the financing integrated in a clear path of transition and strategy?

Third-party opinion systems

An Example

Our Green Evaluation Approach

Weighted aggregate of three:



Common approach used amongst second opinion providers



Unique to S&P Global Ratings



Final Green Evaluation (E1- E4 or R1- R4)

Green Bond Rating Systems

An Example

Carbon Hierarchy

The Mitigation or Adaptation categories account for 60% of the final score. In recognition of the varying levels of contribution to avoiding climate change by different technology, we consider each technology's overall contribution to decarbonization that would not be fully captured by our regional net benefit calculation alone. This gives us the overall score.

Role in Green Transition

Technology

Systematic decarbonization of economies

- Wind and Solar Power, Small and Large Hydro
- Energy management and control

Significant decarbonization of key sectors through low-carbon solutions

- Green Transport apart from hybrid/fuel efficient vehicles
- Green buildings new built best standards/net zero

Decarbonization by alleviating emissions in intensive industries

- Industrial efficiencies
- Green Transport (with fossil fuel combustion) Green buildings refurbishment/new built lower standard
- Energy-efficient products

Decarbonization technologies with significant environmental hazards

- Nuclear
- Large Hydro in tropical areas

Improvement of fossil fuel based activities' environmental efficiency & impact

- Coal to natural gas, Clean fuel production, and Clean use of coal

↑
Increasing contribution
to climate change avoidance

Green Bond Rating Systems

An Example



Water Hierarchy

For water projects we consider each technology's overall contribution to sustainable water use that would not be fully captured by our net benefit calculation alone:

Role in Green Transition

Technology

System enhancements

- Recycling wastewater supply
- Wastewater treatment

Marginal system enhancements

- Reducing water losses in the water distribution network

Marginal system enhancements with material negative environmental consequences

- Water desalination to supply potable municipal water

Demand-side improvements

- Conservation measures in buildings & equipment
- Smart metering

Sustainable Water Use

Green Bond Rating Systems

An Example: Sustainalytics

Second-Party Opinion

Vodafone Green Bond



SESSION IV: STEWARDSHIP & ENGAGEMENT

DR JUDITH STROEHLE



ESG Investing

Recap of Key Messages so far

1. Context
2. ESG Data is not helpful unless used thoughtfully and with the right expectation (divergent, diverse and not predictive)
3. ESG is not impact
4. Materiality is key and broadens in the long-term
5. To guide decisions, you need to define priorities of value and values

To go beyond limits of ESG measures:

- Consider measurement and monitoring as the START of assessment
- Be agile and active in monitoring and consider MULTIPLE SOURCES
- Understand which issues data can clarify for you and which it can't (ESG vs IMPACT)
- Reach out and ENGAGE with companies to get the full picture

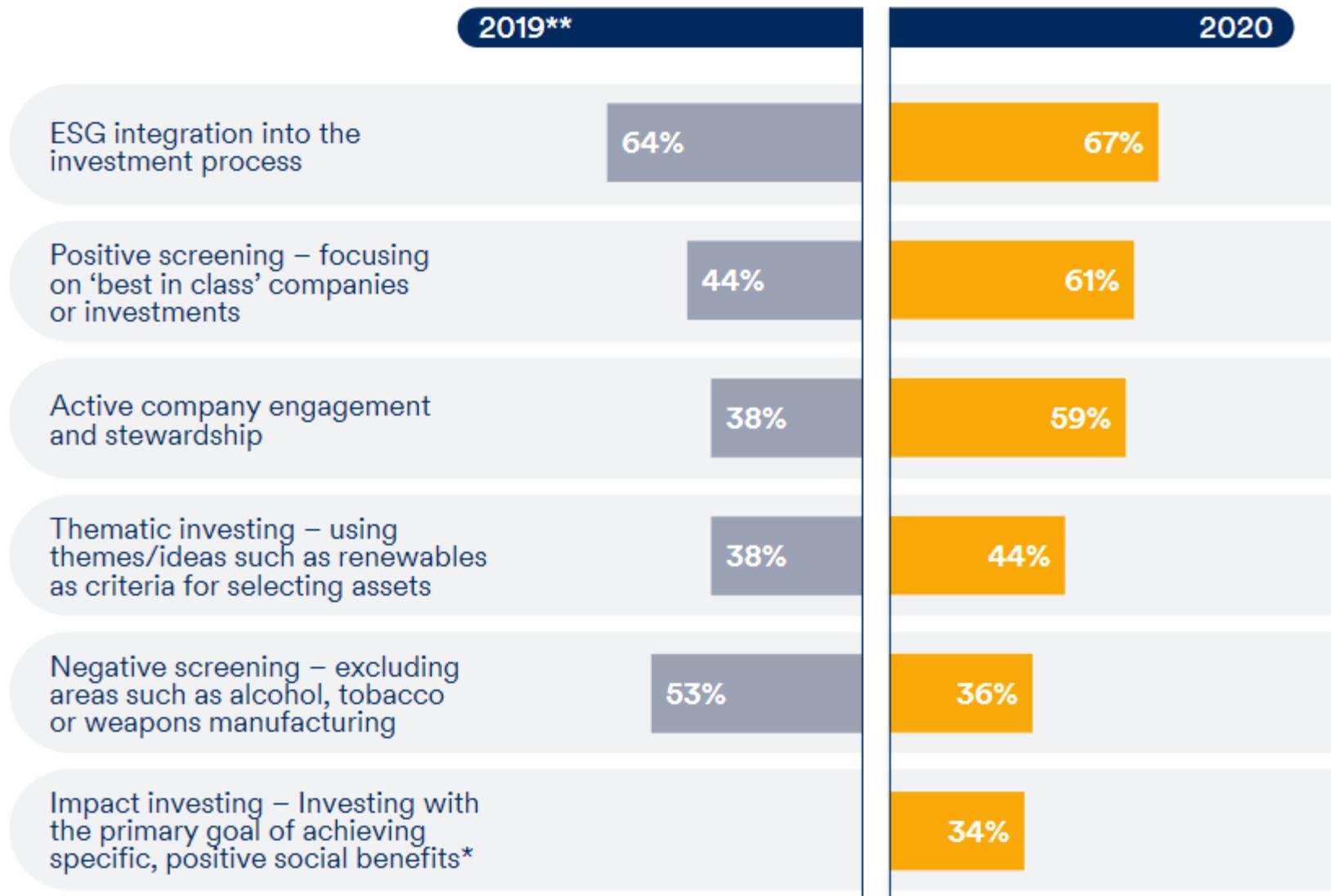
WHAT IS STEWARDSHIP?

“In general terms **stewardship can be defined as the responsible management of something entrusted to one’s care.** (...) In the investment context institutional investors are the agents **acting on behalf of beneficiaries**, who are often long-term savers or members of pension funds.

At an individual company level investor stewardship helps to promote high standards of corporate governance which contributes to sustainable value creation, thereby increasing the long-term risk adjusted rate of return (...).

At an investor level, stewardship is about preserving and enhancing long-term value as part of a responsible investment approach. This includes the consideration of wider ethical, environmental, and social factors and the consideration of relevant systemic risks as core components of fiduciary duty.

In a broader context, stewardship enhances overall financial market stability and economic growth, and (...) directly links to sustainable benefits for the economy, environment, and society.”



STEWARDSHIP

Priorities, Materiality and Timeframe

Policy

- Including
- Investment priorities
 - Significant stakeholders
 - Materiality
 - Timeframe

ESG Integration

- Including
- ESG fundamental analysis
 - Integrated investment decisions
 - Active monitoring of ESG fed by data and reporting
 - ESG at portfolio level

Engagement

- Including
- Building relationships
 - Setting expectations
 - Sharing experiences
 - Escalation
 - Shareholder proposals
 - Collaborations

Voting

- Including
- Voting policy
 - Discussion of voting plans through engagements
 - Proxy voting

Advocacy

- Including
- Support of initiatives
 - Engagement with regulators and other stakeholders

Transparency & Integrity

Stewardship code: Examples

“Stewardship is the responsible allocation, management and oversight of capital to create long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society”

FRC, UK STEWARDSHIP CODE, 2020

UK CODE:

- Includes principles for Asset owners & asset managers, and principles for Service Providers.
- Includes principles on Purpose and governance, Investment approach, Engagement, and Rights and Responsibilities.
- All principles are supported by reporting expectations
- Based on a “comply or explain” logic.

In Taiwan: Stewardship Principles for Institutional Investors, 2020 (Taiwan Stock Exchange TWSE)

Australian Asset Owner Stewardship Code, 2020

Malaysian Code for Institutional Investors, 2014

Japan’s Principles for Responsible Institutional Investors 2017

See more at <https://www.icgn.org/policy/global-stewardship-codes-network>

UK Stewardship Code

All Principles are supported by reporting expectations. These indicate the information that organisations should include in their Stewardship Report and will form the basis of assessment of reporting quality.

When applying the Principles, signatories should consider the following, among other issues:

- the effective application of the UK Corporate Governance Code and other governance codes;
- directors' duties, particularly those matters to which they should have regard under section 172 of the Companies Act 2006;
- capital structure, risk, strategy and performance;
- diversity, remuneration and workforce interests;
- audit quality;
- environmental and social issues, including climate change; and
- compliance with covenants and contracts.

**Responsible Stewardship
is directly linked to Good
Corporate Governance**

PRINCIPLES FOR ASSET OWNERS AND ASSET MANAGERS	PRINCIPLES FOR SERVICE PROVIDERS
Purpose and governance	1. Purpose, strategy and culture
1. Purpose, strategy and culture	2. Governance, resources and incentives
2. Governance, resources and incentives	3. Conflicts of interest
3. Conflicts of interest	4. Promoting well-functioning markets
4. Promoting well-functioning markets	5. Supporting client's stewardship
5. Review and assurance	6. Review and assurance
Investment approach	
6. Client and beneficiary needs	
7. Stewardship, investment and ESG integration	
8. Monitoring managers and service providers	
Engagement	
9. Engagement	
10. Collaboration	
11. Escalation	
Exercising rights and responsibilities	
12. Exercising rights and responsibilities	



Principle 1

Signatories' purpose, investment beliefs, strategy, and culture enable stewardship that creates long-term value for clients and beneficiaries leading to sustainable benefits for the economy, the environment and society.

REPORTING EXPECTATIONS

Context

Signatories should explain:

- the purpose of the organisation and an outline of its culture, values, business model and strategy; and
- their investment beliefs, i.e. what factors they consider important for desired investment outcomes and why.

Activity

Signatories should explain what actions they have taken to ensure their investment beliefs, strategy and culture enable effective stewardship.

Outcome

Signatories should disclose:

- how their purpose and investment beliefs have guided their stewardship, investment strategy and decision-making; and
- an assessment of how effective they have been in serving the best interests of clients and beneficiaries.



Do you have a set of defined
investment believes / priorities?



To be credible to outsiders, investors should consider developing:

Stewardship and Transparency

- Voting policy
- Transparency on Voting and Engagement activities
- Task Force on Climate-Related Financial Disclosures

Governance

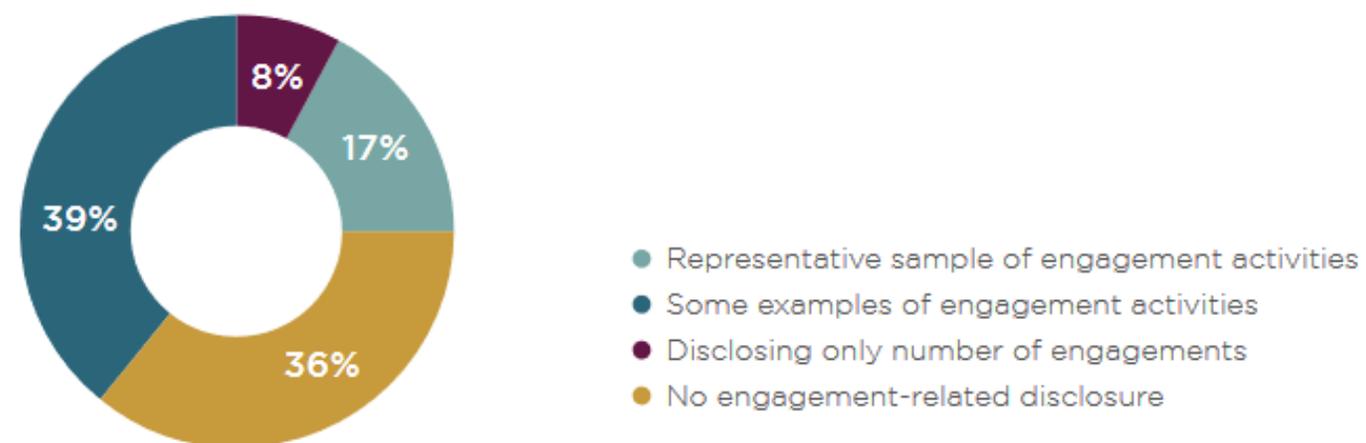
- Oversight of responsible investment
- ESG Products and investment strategies

Stewardship and Transparency

Voting policy & Transparency on Voting and Engagement

- Only 17% of largest 75 investors publish voting rationales
- Publishing comprehensive voting records
- Explaining special exemptions and abstentions
- Providing voting rationales
- Explain potential tensions in voting behaviour

Figure 15: Quality of reporting on engagement activities



ENGAGEMENT

- Why engage?
- How to engage?
- Engage with whom?
- How to overcome obstacles?
- What is success?

Why engage? Investor perspective.

- Go beyond the world of data
- Build relationships
- Contextualize
- Build dialogue and understanding
- Place concerns and expectations
- Offer guidance and insights

REASONS TO ENGAGE ISSUERS ON ESG TOPICS

- ▶ *Inform your proxy voting and voting guidelines*
- ▶ *Augment your research*
- ▶ *Clarify public information*
- ▶ *Identify quality of management indicators*
- ▶ *Gauge sophistication of a company's strategy*
- ▶ *Understand peer performance indicators*
- ▶ *Identify potential vulnerabilities*
- ▶ *Develop insights into investment and growth opportunities*
- ▶ *Understand potential regulatory impacts and threats*
- ▶ *Identify how companies are positioned to mitigate risks or leverage opportunities*
- ▶ *Improve your reputation as an active and engaged owner*

Why Engage? The corporate perspective.

Communication

- Communicating priorities and standpoints
- Finding compromises
- Opportunity to explain and conceptualize

Information gathering

- Capturing investor's priorities
- Capturing trend topics that arise
- Get an outside-in perspective
- Learning about how investors operate
- Understanding market trends

Information utility

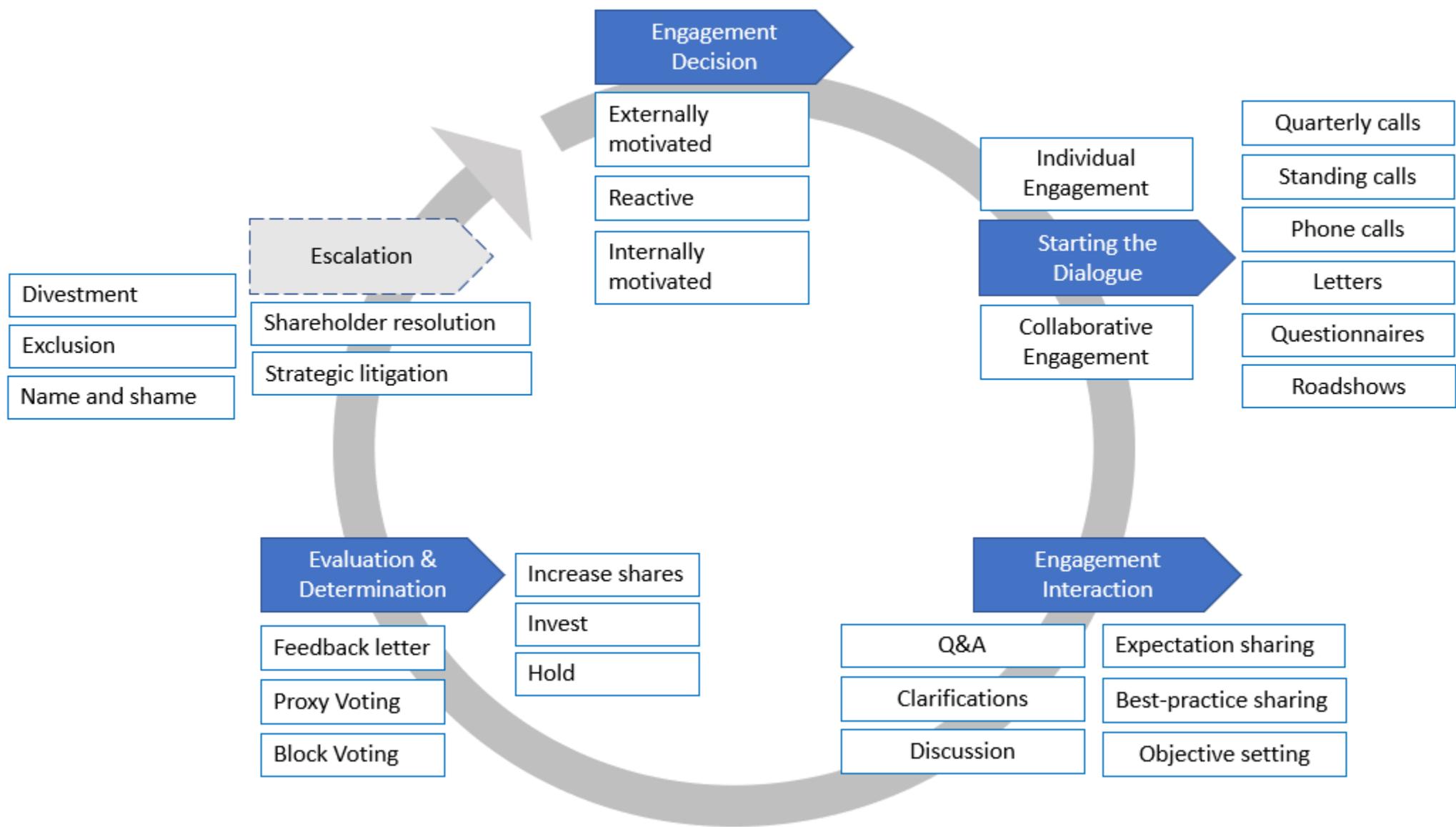
- Informing boards on trends
- Creation of internal drivers
- Getting internal and board buy-in for topics
- Informing company's strategy

Reassurance

- Gathering investor feedback on company plans and projects
- Reassurance that investors care
- Relationship building
- Testing ideas



HOW TO ENGAGE?



Engagement pathways

- **Individual investor contacts company**
 - Can be about specific topic or more generically about sustainability strategy
 - Can be via email, letter or phone call
 - Some use questionnaire instead of request for conversation
 - Company usually decides whether to grant a meeting and if so, who will attend
- **Investor collaboration**
 - Group of investors comes together to address specific issue and specifies a targeted group of companies to engage with (e.g. CA100+)
- **Non-invested entity requests conversation with company**
 - NGOs and other social groups
 - ESG rating agencies
- **Company contacts investors**
 - Company invites to workshops, meetings and informative calls to get investor feedback
 - Often used to inform strategic decisions and prepare for AGM
 - One-on-one conversations as side-events at road-shows
 - Company uses opportunity to inform various investors at once about specific issues

Climate Action 100+

- Investor initiative launched in 2017 to ensure the world's largest corporate greenhouse gas emitters take necessary action on climate change.
- More than 500 investors with more than \$47 trillion in AUM
- Targeting 100 companies which are the 'systemically most important emitters', accounting for two-thirds of annual global industrial emissions

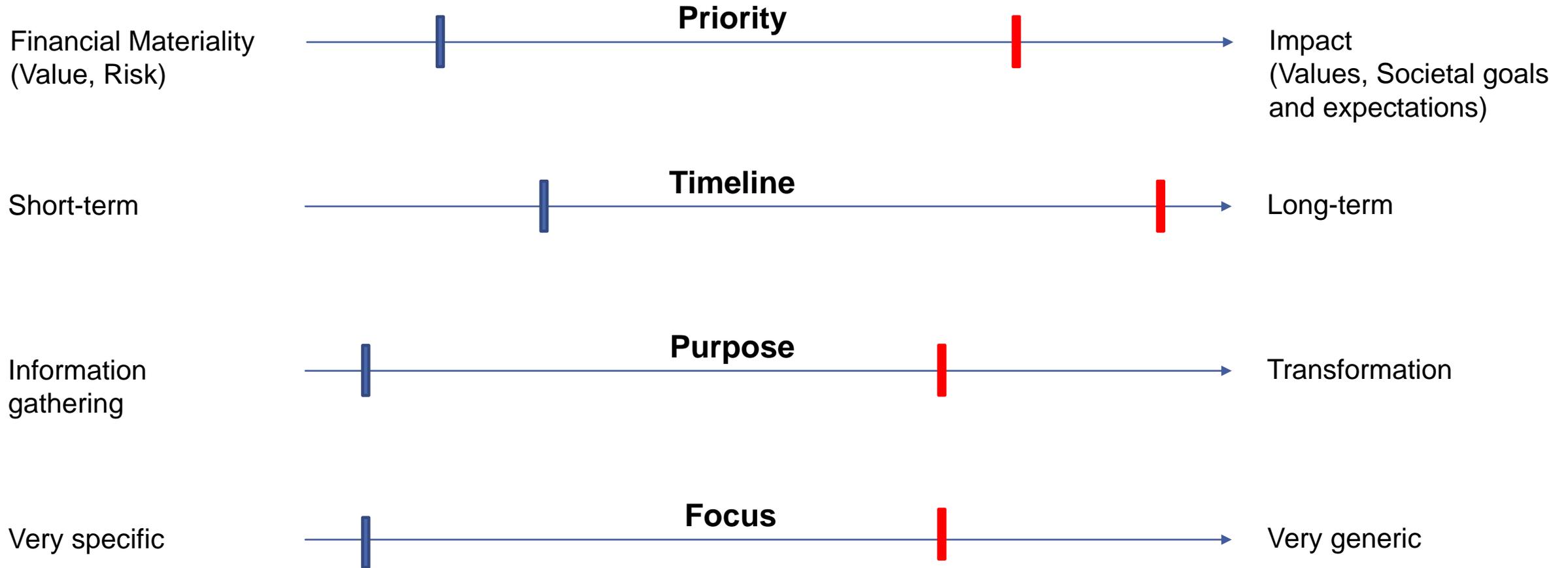


Result examples

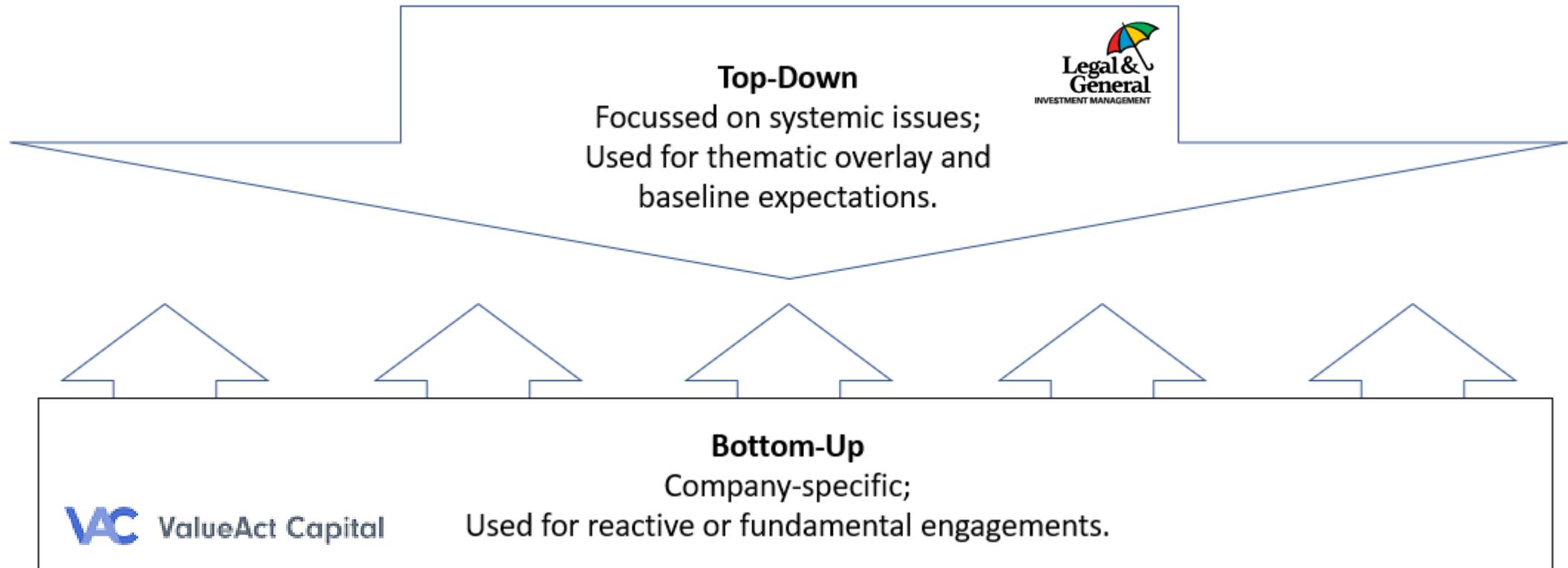
Dec 2018: In response to engagement with Climate Action 100+, Royal Dutch Shell plc (Shell) announces plans to set short-term targets as part of a long-term ambition to reduce the Net Carbon Footprint of its energy products. The company **has now linked these targets to executive remuneration.**

21 May 2019: At BP's annual general meeting, a climate change shareholder resolution has been passed **with the support of 99.14% shareholders.** The binding resolution, filed by investors acting as part of Climate Action 100+, means the company will need to set out a business strategy consistent with the goals of the Paris Agreement on climate change. The resolution received the support of the BP board.

Engagement Design



Engagement Design



Engagement Strategies

Conservatism

Characteristics	Tools
<ul style="list-style-type: none"> ● Focused on risks ● Often driven by minimum standards in client' policies ● Threshold and policy focused ● High reliance on ESG data providers ● High quantity ● Exclusion is often escalation 	<ul style="list-style-type: none"> ● Letter writing ● Private engagement ● Investor collaboration ● Exclusion

Activism

Characteristics	Tools
<ul style="list-style-type: none"> ● Adversarial ● Focus on fulfilling (significant) investor demands ● Willingness to escalate ● Investor knows company and has explicit ideas of change ● Quality-engagement (High stakes) 	<ul style="list-style-type: none"> ● Shareholder resolutions/campaigns ● Naming and shaming ● Public engagement ● Strategic litigation

Opportunism

Characteristics	Tools
<ul style="list-style-type: none"> ● Thematic approach ● Flavour of the year ● Often in collaboration with other investors ● Marketing focused ● Focused on system change (targeting entire sectors) ● Quantity-engagement (high scopes) 	<ul style="list-style-type: none"> ● Letter writing ● Investor collaboration ● Public engagement (in case of investor collaboration)

Constructivism

Characteristics	Tools
<ul style="list-style-type: none"> ● Collaborative ● Consensus-focused ● Focus on materiality ● Relationship building ● Investor knows company ● Open language ● Quality 	<ul style="list-style-type: none"> ● Frequent outreach from both side ● Active ownership (incl. voting where possible) ● Private engagement

How to engage? Forms of dialogue

→ How a conversation is held can significantly influence the quality & effectiveness of engagement.

Reactive Dialogue

One-off or short-term. One ask, one answer. Often related to very specific controversies, scandals, single ESG scores. Does not set expectation for long-term, but rather demands explanations.

Reflexive Dialogue

Short- or medium-term. Explanation of external perspective with dialogue seeking awareness raising as to why this issue / strategy is important. Focus often broader (“how is stakeholder capitalism lived?”). Sets broader expectation for long-term, but does not specify long-term goals.

Strategic Dialogue

Medium- or long-term. Dialogue about setting expectation, seeking common ground and collaboratively defining goals. Broader topical focus is matched with specific targets for the long-term.

From Dialogue to Relationship

→ To achieve reflexive or strategic forms of dialogue, relationship building is key

Consider:

- Scope of ask and type / intensity of engagement; they need to be balanced
- Have intention and be prepared
- Create a process and set expectations
- Creating a dialogue instead of accusing
- Listening instead of interrogating
- Share experiences where appropriate

Reactive Dialogue

Reflexive Dialogue

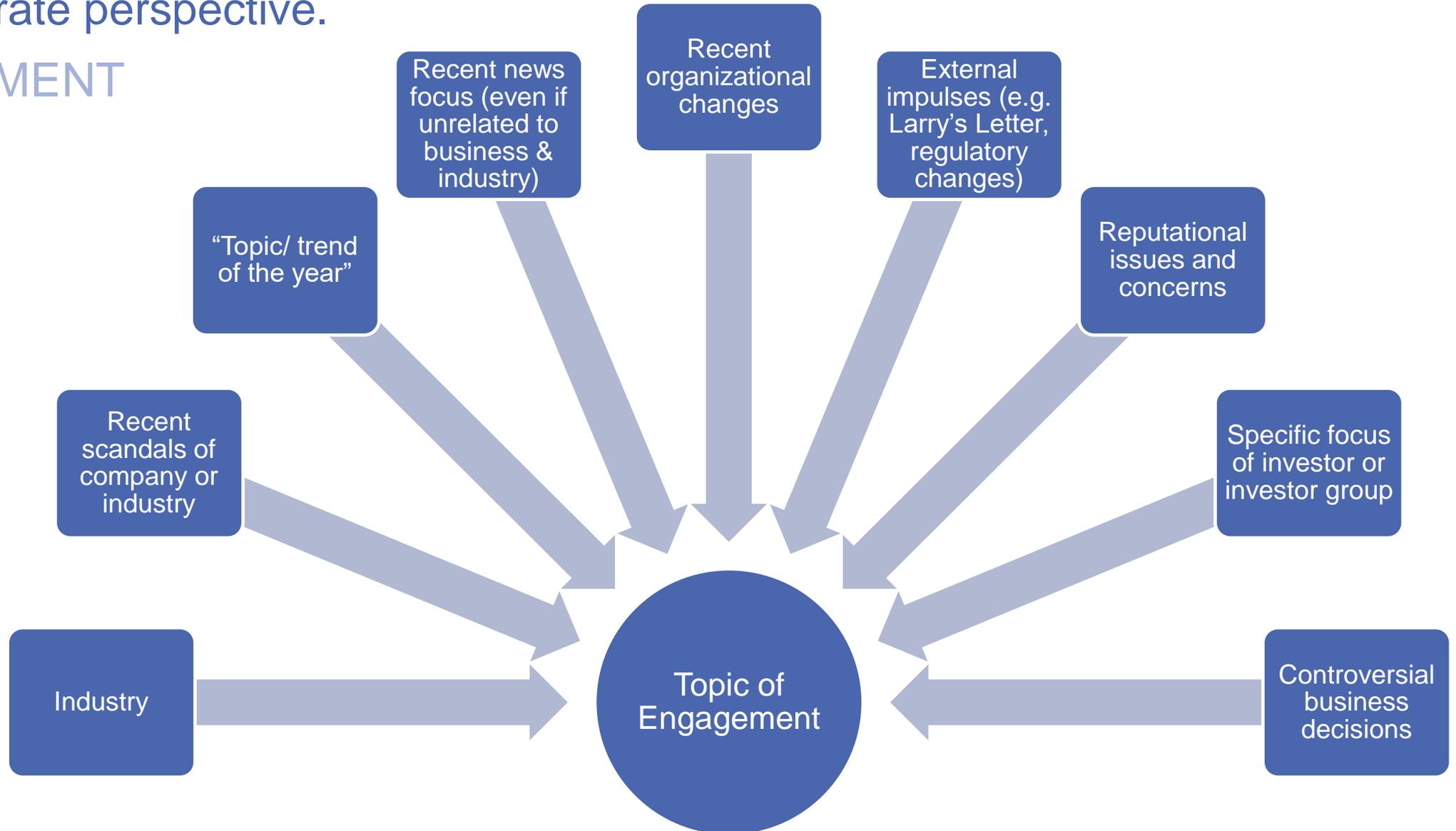
Strategic Dialogue



ENGAGEMENT TOPICS

The corporate perspective.

ENGAGEMENT TOPICS



Engagement as Campaigns. Example.

Campaigns according to priority topics (selection):

- **Diversity Campaign:**
Creation of proprietary LGIM Diversity score. Engagement with companies at the bottom 10%. Scores are public and updated on a monthly basis. Laggards are being contacted annually (by letter) to inform them about low score and how they can improve.
IN ADDITION targeted 20 largest EU firms with poor gender balance on board, outlining 30% and disclosure expectation.
- **Climate Impact Pledge Engagement (2° Scenario):**
Selection according to company size (in both equity and fixed income offerings) and 6 key issue ranks (statement re climate, transparency, board structure, etc.). Usually sending letter with request for follow-up meeting. If no response, escalation from IR to management to board. Engagement expectation varies by sector, but largely focusses on target-setting and scenario disclosure.



Climate change



Remuneration



Diversity



Board composition



Strategy

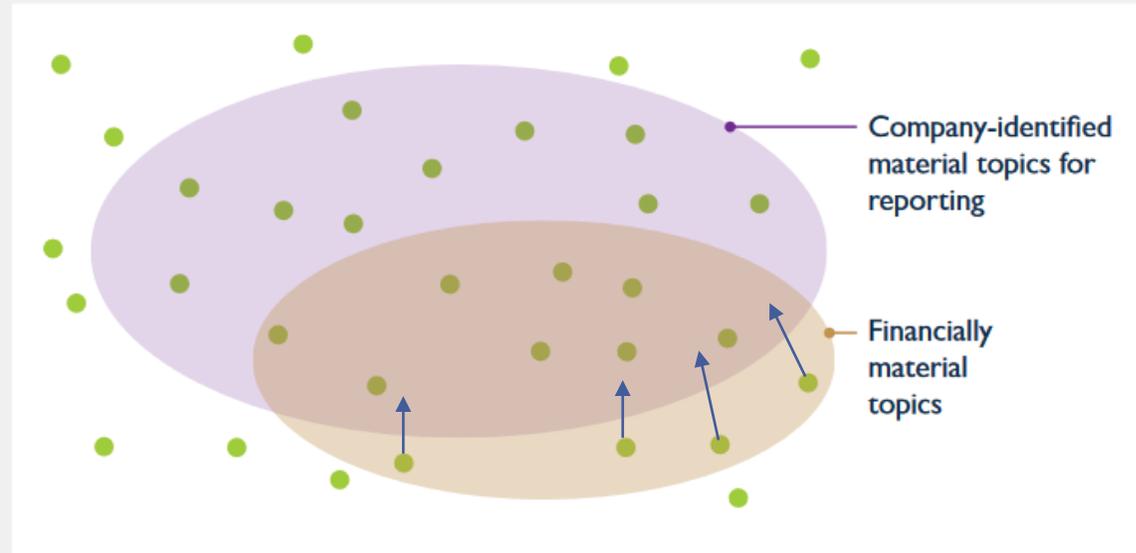
Materiality and Engagement

- Be aware about what the company thinks is material
- Know whether the topic they want to engage on falls into your materiality circle
- Be ready to explain why you think your focus is justified (i.e. for long-term value creation)
- But also be willing to listen.
- Seek reflexive dialogue

Do investors and companies agree on what is material?

FIGURE 4. THE UNIVERSE OF MATERIAL TOPICS

Simplified representation of sustainability topics and how they might be classified as being material for reporting and/or financially material



● Sustainability topics

FIGURE 17. COMPARISON OF ISSUES IDENTIFIED BY COMPANIES AND INVESTORS

Issue	MINING		METALS		ELECTRIC UTILITIES	
	Companies	Investors	Companies	Investors	Companies	Investors
1	Environment	Environment	Environment	Climate	Environment	Climate
2	Occupational Health and Safety	Communities	Occupational Health and Safety	Environment	Occupational Health and Safety	Environment
3	Communities	Occupational Health and Safety	Communities	Occupational Health and Safety	Climate	Customers
4	Labor	Labor	Climate	Communities	Communities	Innovation

Please note that in this figure the GRI Aspects identified as most reported in section 3 of this publication are aggregated into larger themes for the purposes of comparison, for example, the issue of environment includes the GRI Aspects Energy, Biodiversity and Water.
Source: GRI and RobecoSAM.

Addressing prioritization

Addressing scope



OBSTACLES

Perceived Engagement Obstacles – The corporate perspective.

Company Operations	Engagement Focus & Strategy	Investor Preparedness	Opaque Ratings & No Standards	Structural problem
Missing capacity	Non-material requests	Investors without preparation and focus	ESG ratings and black box	Missing alignment on investor side
Expectation management	Investor stuck on specific issue	Misconceptions (wrong benchmarks)	Opaqueness of investment decision making	Complexity and mass of issues means "hit and miss"
Reactive instead of pro-active boards	Investors who vote / exclude without engagement	Over-reliance on ESG scores		Missing commitment from large investors
	Focus on controversies instead of broader strategy		No measurement and reporting standards	Small investors with big demands
	Missing frankness			
	Too narrow topic focus			
	NGOs which focus on ESG ratings without seeking engagement first			
	NGOs which publish negative report without seeking engagement first			

Perceived Engagement Obstacles – The investor perspective.

- Difficult to attribute change to activities
- Bad practice of engagement statistics (incentivize many and low-quality engagements)
- Establishing feedback loops to companies about divestment can be difficult due to trade secrecy (proxy side different)
- Preparation crucial – unprepared engagers and no clarity on objectives will impede engagement
- Key differences between proxy season and rest of the year.
- Engagement not always possible to plan – sometimes need to “go with the flow” and take conversations where they are
- Finance can only push uphill so far, need for systems change: flattening the slope
- Small companies without capacity or companies in emerging markets are a challenge.
- Culture can be a challenge.
- Ownership can be a challenge, particularly where ownership is concentrated and leverage of investors is lower
- Too many views in public equity
- Speaking the same language is biggest concern: requires diplomatic qualities and topical know-how
 - > Skill of engagers



WHAT IS ENGAGEMENT SUCCESS?

Engagement Success?

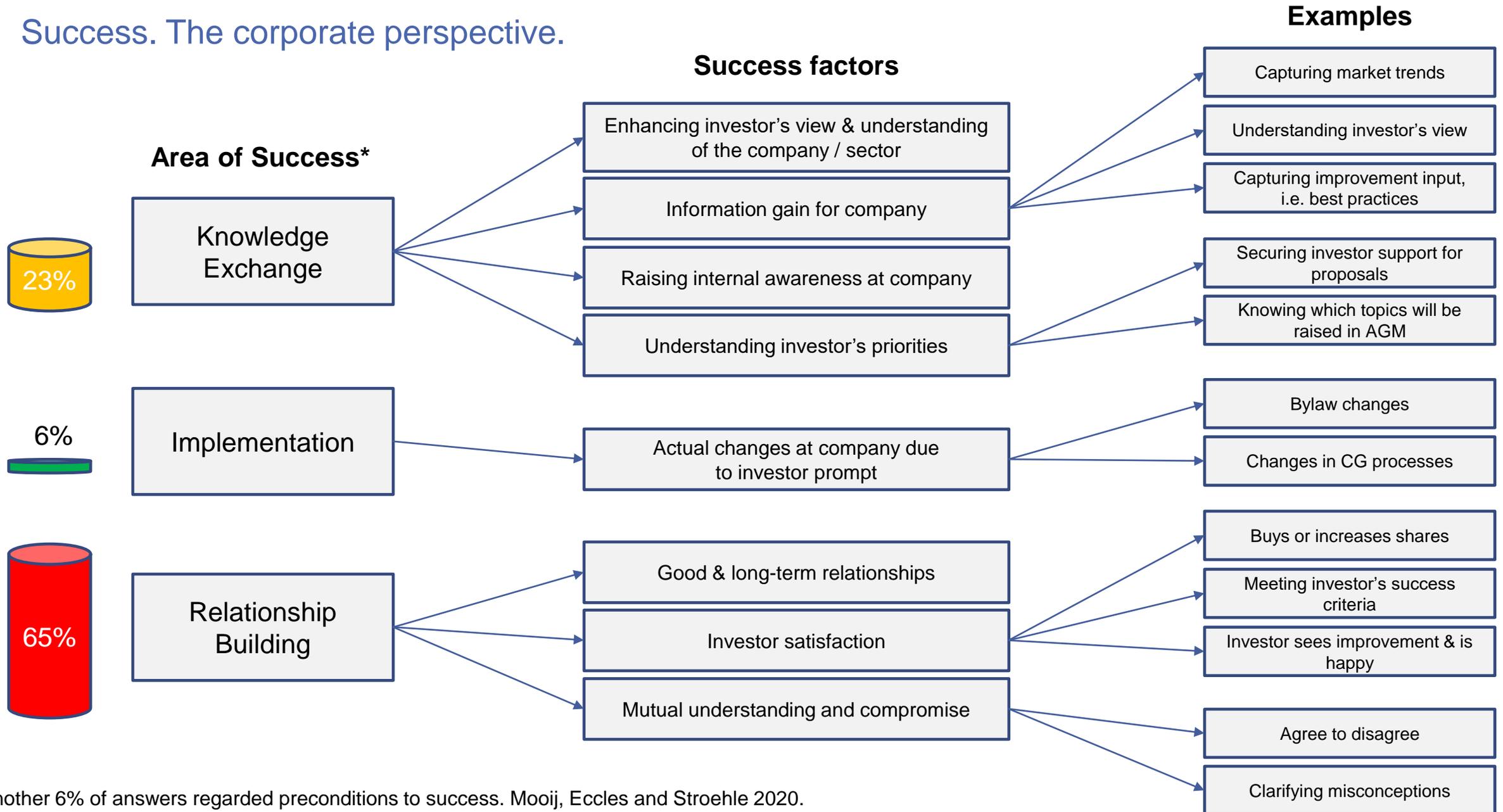
Tangible

- Objectives Met
 - Information gathered
 - Access granted
 - Disclosure provided
 - Transformation started / achieved

Intangible

- Creation of long-term and trust-based relationship
 - Being met with frankness and honesty
 - Having discussions with the right people
 - Being asked for advice and input
 - Placing ideas and best practices

Success. The corporate perspective.



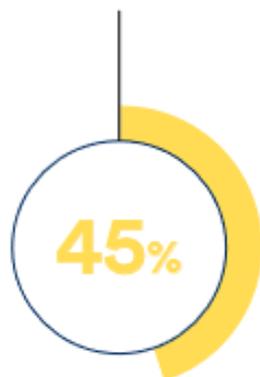
* Another 6% of answers regarded preconditions to success. Mooij, Eccles and Stroehle 2020.

What would you class as successful engagement in regards to influencing companies to make sustainable changes? Select all that apply

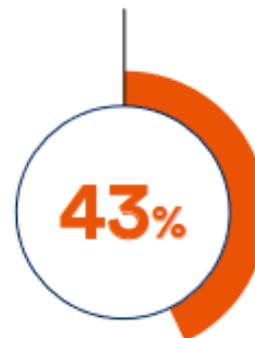
Transparent reporting



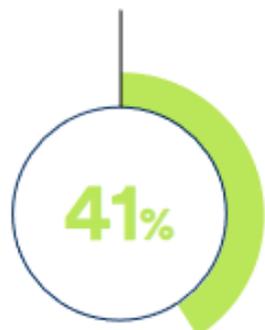
Evidencing a tangible outcome



Consistency voting against companies in order to drive change



Withdraw / 'exclude' investments from these companies



Public statements against companies



None of these



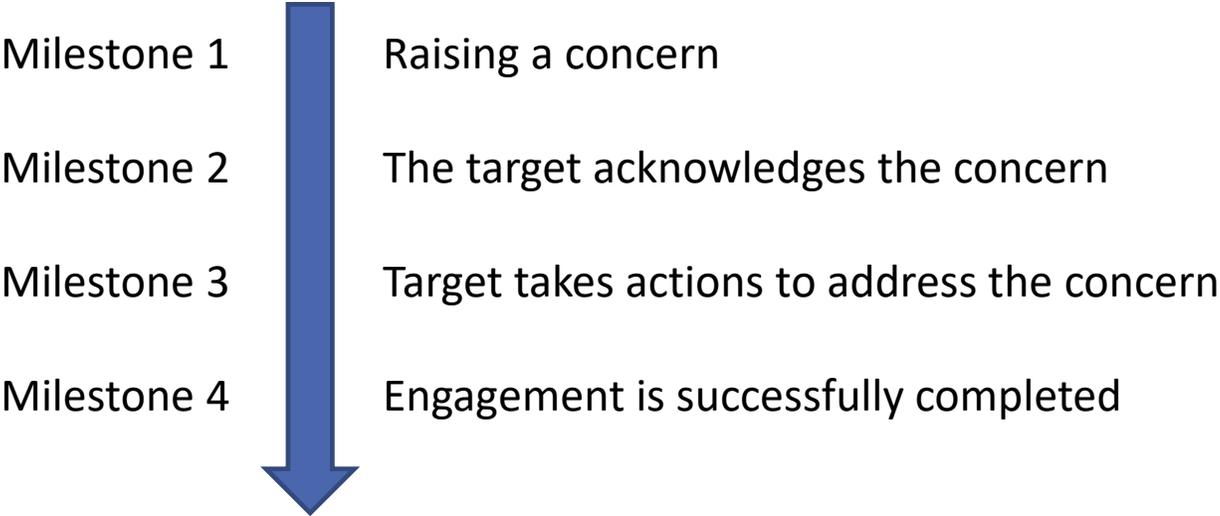


HOW TO REPORT ON ENGAGEMENT

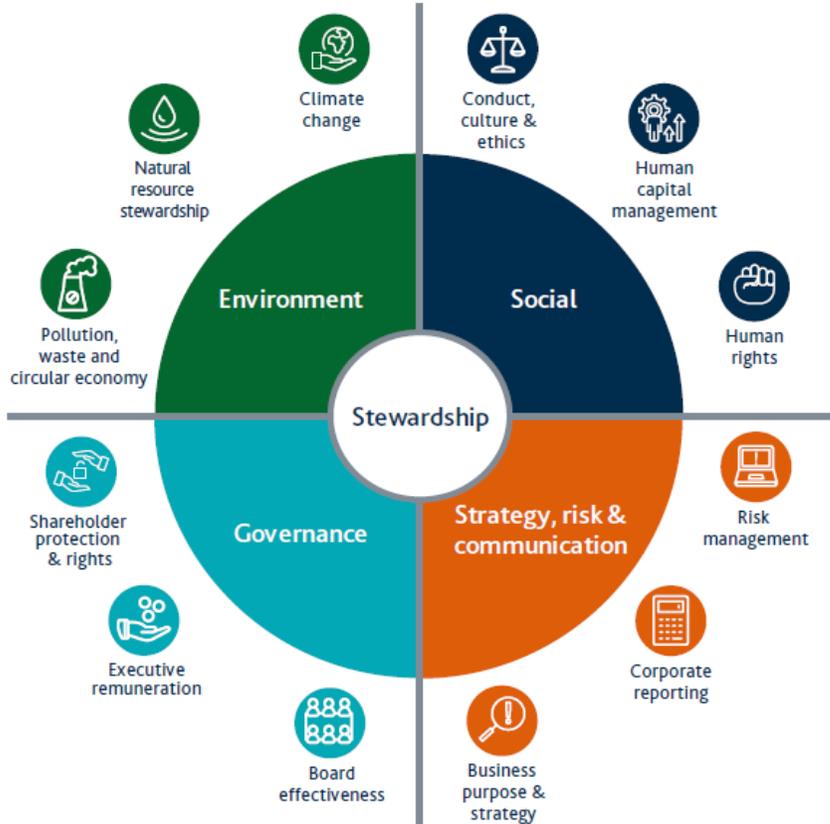
Capturing (tangible) engagement success. Example.

Federated Hermes EOS

Each theme is outlined with a) reason for selection, b) objectives and sought outcomes, c) viewpoint on public policy & best practice.



Engagement themes for 2019-21

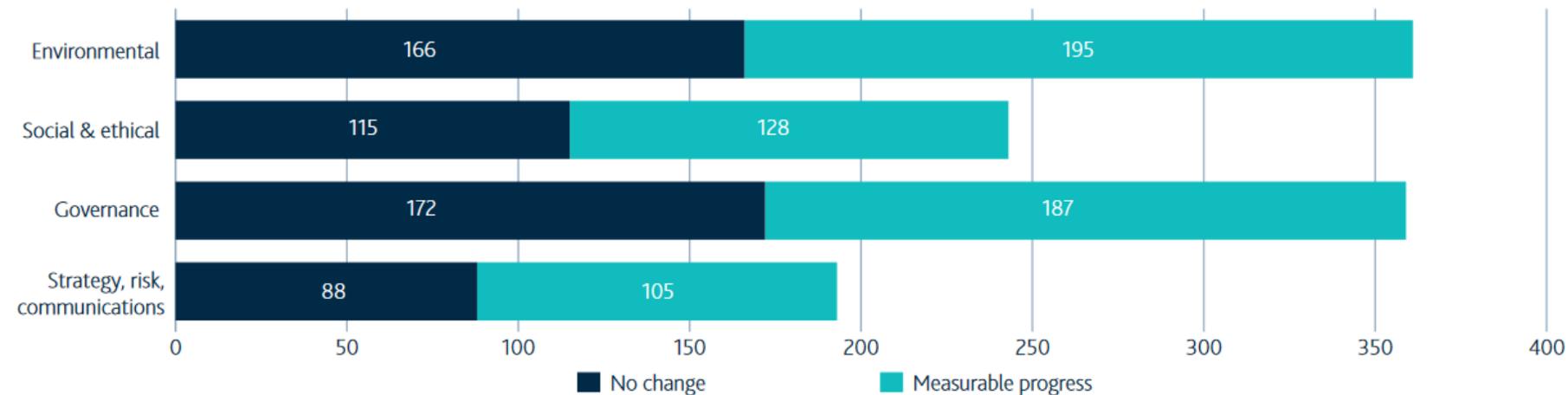


Focus on scale?

Engagement progress in 2019

During 2019, we engaged with 1,043 companies (2018: 746), covering 2,854 identified objectives or issues (2018: 2,084), and we made progress on 53% of all objectives contained within our engagement plan (2018: 48%). Please see page 6 for an explanation of how the composition of our engagement plan has changed.

	# of companies engaged	# of issues and objectives engaged	# of objectives engaged	# of objectives completed	% of objectives with progress
Engagement programme	366	1676	782	88	51%
Other companies	677	1178	181	16	60%
Grand Total	1043	2854	963	104	53%

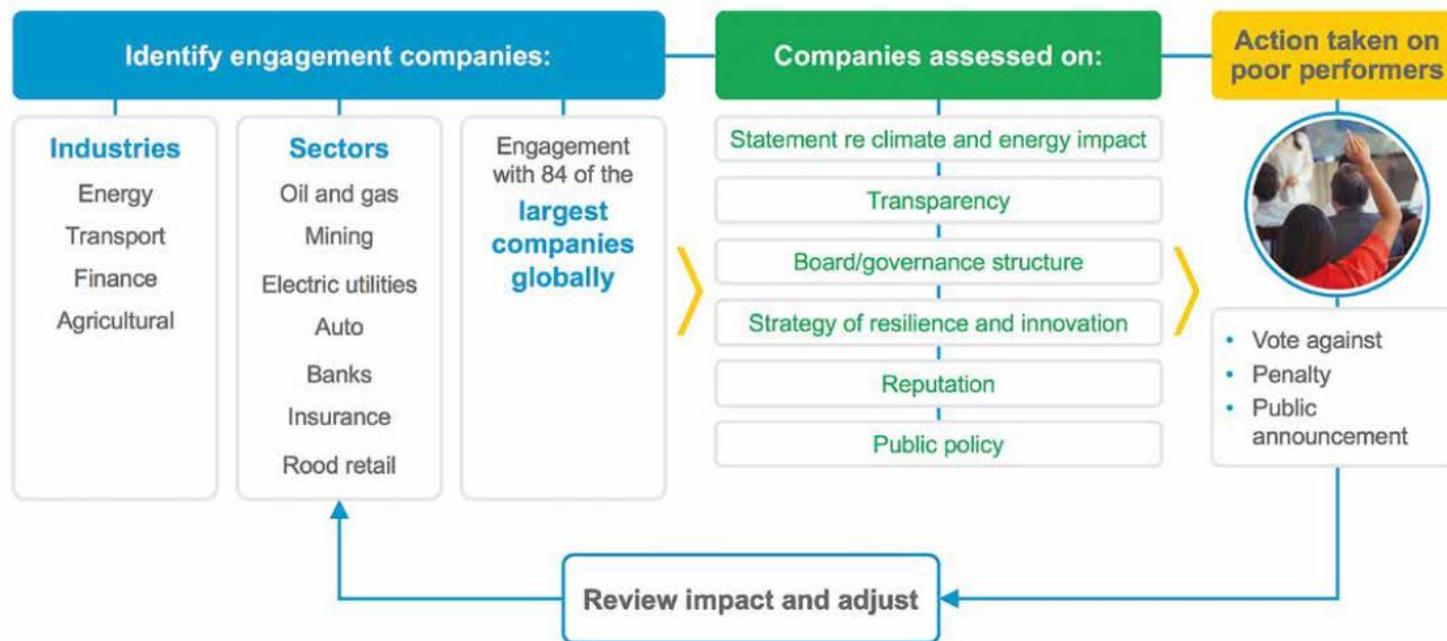


How to report on engagement?

	Report Period	Climate-Risk Engagement			Climate-Related Case Studies			Climate Engagement Outcomes	
		Discussed as Theme?	Priority for Following Period?	Quantified?	Examples Provided?	Identify Companies Engaged?	Demonstrate Outcomes?	Progress Measured?	Outcomes Reported?
AllianceBernstein	2019*	—	—	—	Yes	Yes	Yes	—	—
Allianz GI	2018	Yes	Yes	Yes	Yes	—	—	—	—
Amundi	2018	Yes	Yes	Yes	Yes	—	—	—	—
Aviva	2018	Yes	Yes	Yes	Yes	Yes	Yes	—	—
BlackRock	2019*	Yes	Yes	Yes	Yes	—	Yes	—	—
BNP Paribas	2018	Yes	Yes	—	Yes	Yes	Yes	—	—
Calvert	2019*	Yes	Yes	—	Yes	Yes	Yes	—	—
Dimensional	2019*	—	—	—	Yes	—	—	—	—
DWS	2019	Yes	Yes	—	—	—	—	—	—
Goldman Sachs	2019*	Yes	—	—	Yes	—	Yes	—	—
Invesco	2018	—	—	—	Yes	—	—	—	—
LGIM	2018	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Nordea	2019	Yes	Yes	—	Yes	Yes	—	—	—
Robeco	2018	Yes	Yes	—	Yes	Yes	Yes	—	—
Schroders	2018	Yes	Yes	—	—	—	—	—	—
State Street	2019*	Yes	Yes	Yes	Yes	Yes	Yes	—	—
T Rowe Price	2018	—	—	—	—	—	—	—	—
TIAA / Nuveen	2019*	Yes	—	—	—	—	—	—	—
UBS	2019	Yes	Yes	—	Yes	—	Yes	—	—
Vanguard	2019*	Yes	—	Yes	—	—	—	—	—

How to report on engagement? Example.

Climate Impact Pledge: third engagement cycle underway



Includes:

- Quarterly updates (e.g. on reviewed frameworks),
- Key topics and objectives in targeted sectors,
- Amount of companies engaged and type of engagement,
- Progress made due to these efforts (objectives met or under way),
- Specific examples and case studies (a longer, confidential version for clients and a shorter, anonymized version for public disclosure),
- Public policy updates,
- Voting records,
- Shows (to some extent) escalation.

Is all reporting meaningful?

Exhibit 3 Engagement Strategies That Amplify Influence

	Climate engagement laggards named?	CEO letter addresses climate risk?	Active ownership strategy references shareholder resolution filing?	Filed or co-filed climate change shareholder resolution?	
AllianceBernstein	—	—	—	—	
Allianz GI	—	—	Yes	—	18
Amundi	—	—	—	—	
Aviva	—	—	—	Yes	5
BlackRock	—	Yes	—	—	47
BNP Paribas	—	—	Yes	Yes	2
Calvert	—	—	Yes	Yes	
Dimensional	—	—	—	—	
DWS	—	—	Yes	—	19
Goldman Sachs	—	—	—	—	
Invesco	—	—	—	—	
LGIM	Yes	—	—	Yes	3
Nordea	—	—	—	—	
Robeco	—	—	—	Yes	1
Schroders	—	—	—	Yes	7
State Street	—	Yes	—	—	39
T Rowe Price	—	—	—	—	
TIAA / Nuveen	—	—	—	—	
UBS	—	—	—	Yes	33
Vanguard	—	—	—	—	

RECAP: Engagement

Avoid

- Engaging only on single data points / ranking without contextualization.
- Going into an engagement under-prepared.
- Sending tick-box questionnaires.
- Being judgmental or prescriptive.

Instead

- Have a good explanation for your concern / reason for your engagement.
- Understand the problem and possible solutions.
- Build trust and make interactions meaningful.
- Show understanding and be willing to listen.
- Create long-term relationship