

Verity Chegar

Director, ESG Integration Team Lead

BlackRock®

Sustainable Investing at BlackRock

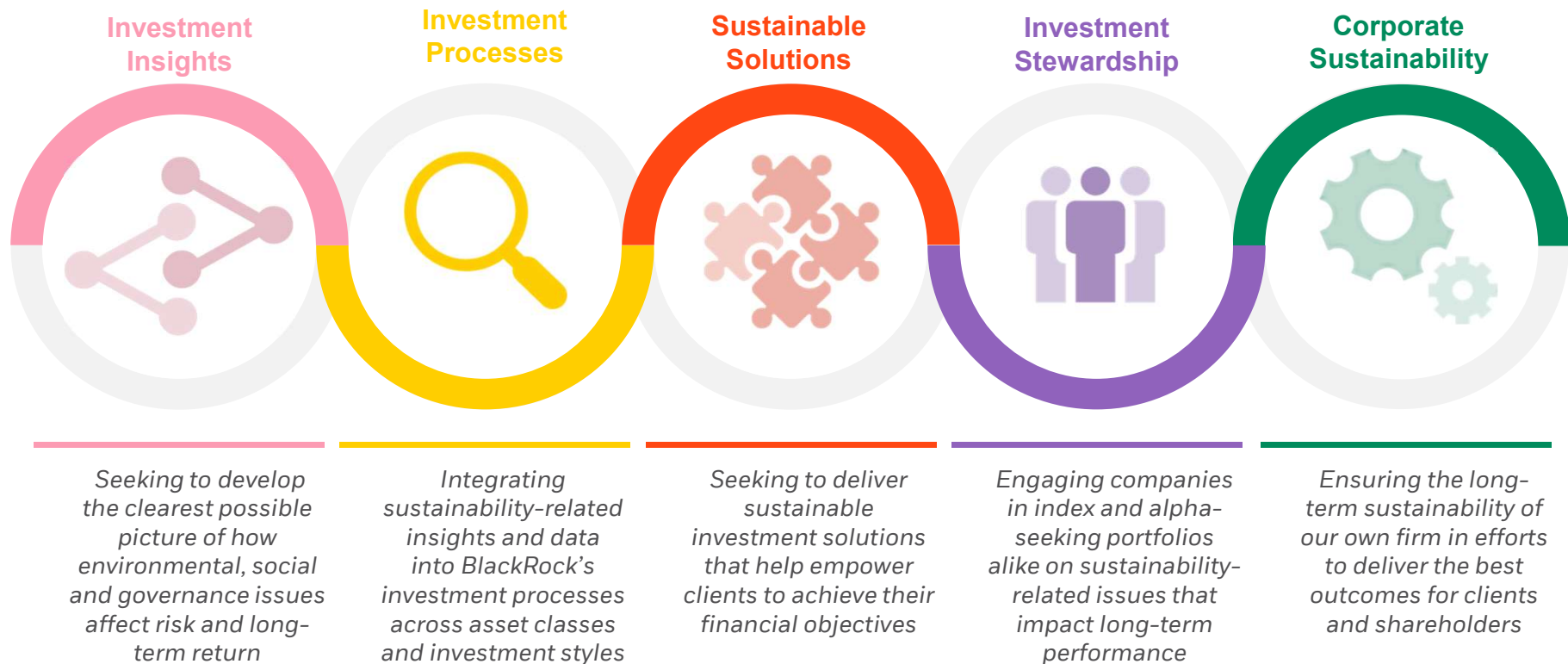
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Sustainability at BlackRock

Sustainable investment options have the potential to offer clients better outcomes, as a result, we are making sustainability integral to the way BlackRock manages risk, constructs portfolios, designs products, and engages with companies.



Source: BlackRock Sustainable Investing, January 2020. For illustrative purposes only.

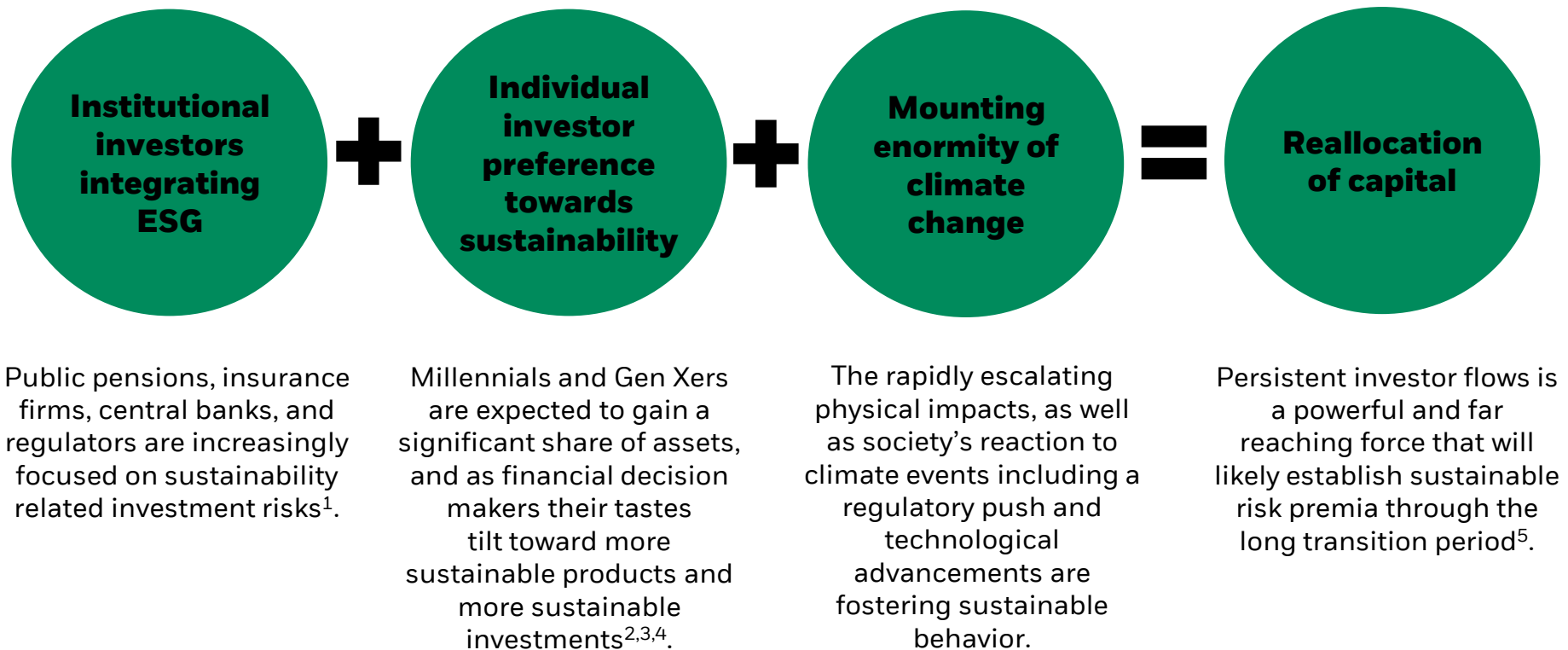
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The evidence on climate risk is compelling investors to reassess core assumptions about modern finance. These questions are driving a profound reassessment of risk and asset values. In the near future – and sooner than most anticipate – there will be a significant reallocation of capital.”

Source: Larry Fink, 2020 Annual Letter to CEOs.

Sustainability: A tectonic shift

Society's changing attitudes toward sustainability represent a structural shift for investing on medium to long term horizons – a shift we believe financial markets are a long way from fully reflecting.



Source: 1. Mercer. "Global Insights on ESG in Alternative Investing" (2015). Illinois The Sustainable Investing Act (HB 2460) becomes effective January 2020. Section 78(3) of Regulation 909 (the Regulation) under the Pension Benefits Act (PBA), effective on January 1, 2016. 2. Deloitte. "The future of wealth in the United States" (2015). 3. Center on Wealth and Philanthropy at Boston College, "A Golden Age of Philanthropy Still Beckons: National Wealth Transfer and Potential for Philanthropy Technical Report" (2014). 4. The 2017 BlackRock Global Investor Pulse survey found that 67% of millennials – the cohort of people born between 1982-1998 – want investments to reflect their social and environmental values. 5. <https://www.blackrock.com/us/individual/literature/whitepaper/bii-davos-brief-2020.pdf>

Sustainability is BlackRock's new standard of investing

Source: GEC 2020 Letter to Clients. Additional commitments reflected in the letter.

- Multiasset and model portfolio solutions use **ESG funds as building blocks** in standard offerings
- All **active portfolio managers integrate ESG** into their investment processes by 2020
- Stewardship **raises the bar for disclosure** on votes and from companies
- Active portfolio managers reduce risk by **scrutinizing highest ESG risk issues** like thermal coal and controversial weapons systems manufacturers
- ETFs and mutual **funds disclose sustainability characteristics** by 2020
- New offerings **expand options for ESG investment** in active and index strategies

BlackRock's Sustainable Acceleration

1 Strengthen integration

Seek to build sustainable, resilient and transparent portfolios

- Make sustainability our standard offering in solutions
- Fully integrate ESG in active portfolios and advisory strategies by end of 2020
- Reduce ESG risk in active strategies and exit from high risk issues, such as thermal coal producers
- Put ESG analysis at the heart of Aladdin
- Provide ESG reporting for all funds¹

2 Increase access

Provide clients with sustainable investment choices

- Grow sustainable active investing strategies across global energy transition and impact investing
- Double ESG ETFs to 150, with sustainable versions of flagship index products
- Simplify and expand iShares ETFs, including ETFs with fossil fuel screens
- Partner with index providers to expand and improve universe of sustainable indexes for easier benchmarking

3 Enhance transparency

Intensify engagement with companies on sustainability-related risks

- Collaborate as a Climate Action 100+ member
- Map engagement priorities to United Nations Sustainable Development Goals (UN SDGs)
- Disclose votes quarterly with rationales and more reporting on high profile votes
- Urge companies to publish disclosures aligned with the Sustainability Accounting Standards Board (SASB) and Task Force on Climate-related Financial Disclosures (TCFD)—or vote against directors

Source: GEC 2020 Letter to Clients. Additional commitments reflected in the letter.

1. All BlackRock fund webpages and factsheets will report on MSCI ESG metrics.

ESG Integration

ESG integration

Our conviction is straightforward – in order to achieve better risk-adjusted returns, investors need to take into account the full set of risks and opportunities facing a company or an issuer – and that includes sustainability issues.

ESG is information

Environmental, social, and governance (ESG) information is **another set of inputs** in the mix of market signals, financial reports, unstructured data, and research opinions investors consider.

Integration is process

Teams integrate ESG into their investment process (analysis, portfolio construction and portfolio review). We start with a consistent philosophy and tailor the approach for each investment strategy.

Understanding ESG risk

Risk professionals work with investment teams to monitor ESG-related exposures to deliver investment outcomes our clients expect.

“

*Integrating **ESG information**, or sustainability considerations, should be part of **any robust investment process**.”*

*- BlackRock ESG
Investment
Statement*

Source: BlackRock Sustainable Investing, January 2020. BlackRock ESG Investment Statement: <https://www.blackrock.com/corporate/literature/publication/blk-esg-investment-statement-web.pdf>

At BlackRock, investors are responsible for ESG integration

Global Executive Committee

Investment Subcommittee oversees investment teams and processes

BlackRock Sustainable Investing

team sets ESG policy and coordinates implementation

ESG Integration Partners

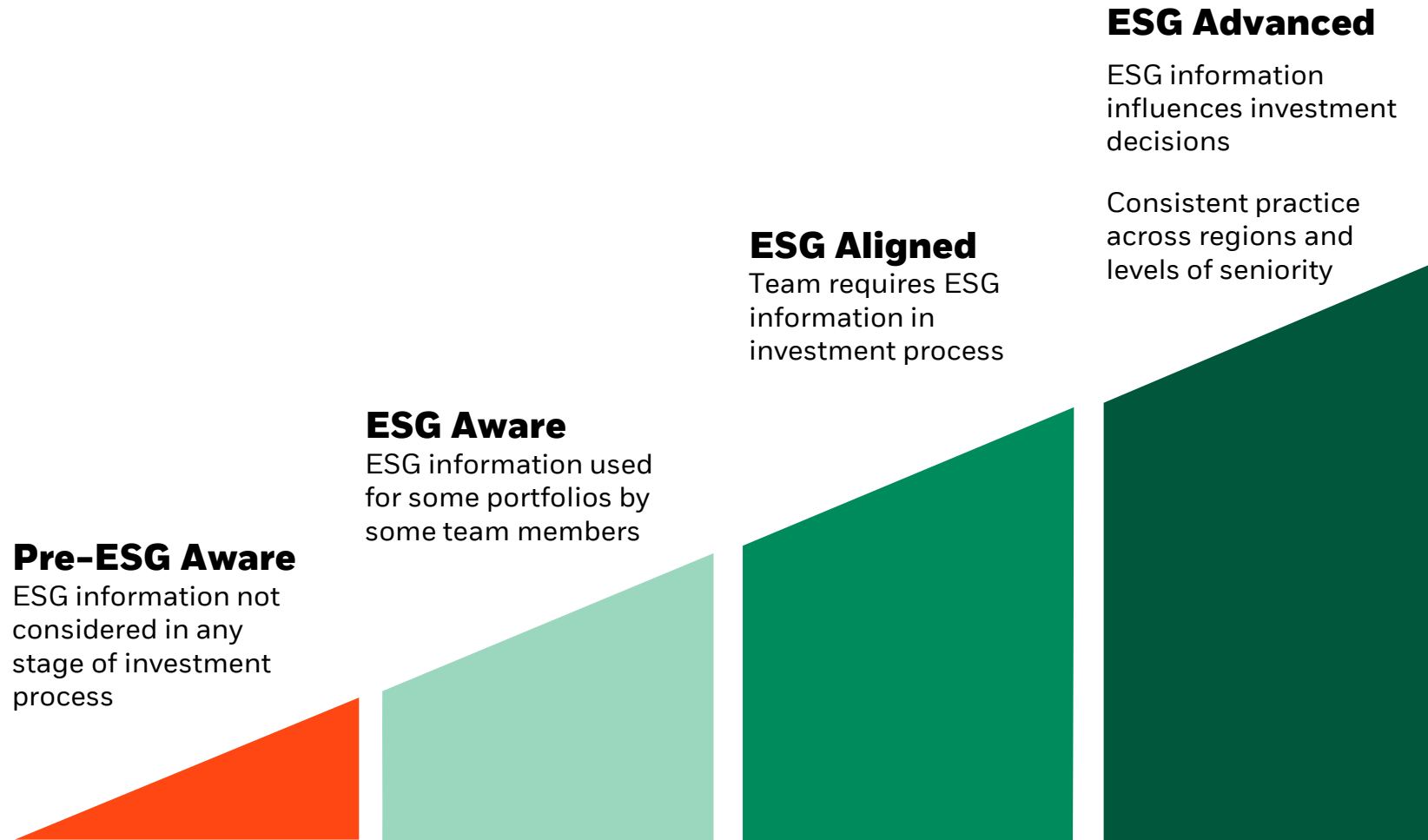
content experts from each investment team customize firm approach for their asset class

Investment Professionals

analysts and portfolio managers incorporate ESG risks and opportunities into investment decisions

ESG Integration Evaluation

By the end of 2020, all active portfolios and advisory strategies will be fully ESG integrated. ESG risk will be evaluated with the same rigor as traditional risk.



There is no guarantee that a positive investment outcome will be achieved.

Improving our practice and increasing transparency

We describe our approach to ESG integration in our annual [PRI report](#) and share PRI's scores

		2014	2015	2016	2017	2018	2019
Strategy & Governance		A	A	A	A+	A	A+
Direct	Listed Equity Incorporation	A	A	A+	A	B	A
	Listed Equity Active Ownership	A	A	A	A+	A	A+
	Fixed Income SSA	D	E	A	B	A	A
	Fixed Income Corporate Financial			B	A	A	A
	Fixed Income Corporate Non-Financial			B	A	A	A
	Fixed Income Securitized			E	B	B	B
	Private Equity				C	A	A
	Property		E	B	B	A	A
	Infrastructure				A	A	A
Indirect	Listed Equity Incorporation					A	A
	Fixed Income SSA					A	A
	Fixed Income Corporate Financial					A	A
	Fixed Income Corporate Non-Financial					A	A
	Fixed Income Securitized					A	A
	Private Equity					A	A

Source: Principles for Responsible Investment. PRI's [high-level assessment methodology](#) and [companion document for each indicator](#) explain PRI scores. Scores can be A+, A, B, C, D, E.

Strengthening ESG integration in our investment processes

2018

team level

2020

fund level

Material Insights

- ✓ **Document case studies of how ESG influences investment decisions**

Increasing access to useful information and building capacity for ESG information analysis through:

- ESG analytics development
- Aladdin integration
- climate risk tools and data
- peer-to-peer learning
- materiality roundtable discussions
- custom digital learning experiences

Investment Process

- ✓ **RQA to review ESG in regular portfolio reviews beginning 1Q20**
- ✓ **Portfolio management teams to scrutinize highest ESG risk assets**

Portfolio compliance has blocked buy orders in all active equity and fixed income portfolios for:

- **thermal coal** (>25% revenue)
- **controversial weapons** systems manufacturers (>0% revenue)
- **civilian firearms** manufacturers (>0% revenue)

Transparency

- ✓ **Clear statement of investment process and ESG considerations**

Articulating our approach both broadly and specifically at the firm, team, and strategy level.

By the end of 2020, **BlackRock will publish sustainability characteristics** for all BlackRock mutual funds including data on highest risk holdings and MSCI ESG fund scores and carbon.

Source: BlackRock Global Executive Committee 2020 Letter to Clients. . All BlackRock fund webpages and factsheets will report on MSCI ESG metrics.

ESG integration across a range of investment approaches

Fixed Income

The **Emerging Markets Debt (EMD)** team created an **EM Corporate ESG Scorecard**, which leverages ESG insights from external data providers and internal research and engagement to produce an issuer-level proprietary ESG rating, which can be considered with the team's credit rating and outlook for a company.

Excerpt from EMD Corporate ESG Scorecard:

BLACKROCK [®] EM Corporate ESG Scorecard					
	Country	Chile			
	XX		Sector	Consumer	
SUMMARY					
	JESG Score	Sustainalytics ESG Score	MSCI ESG Score	Average Agency Score*	
	62	40	29	35	(1)
Sector Average****	55	50	48	37	(4)
Country Average****	64	50	47	36	(1)
Credit Rating Average****	57	50	43	35	(1)
Internal ESG Score*** ESG Credit Impact					
				26	(1)

Active Equities

The **Fundamental Active Equity (FAE)** team added an ESG section to its **Aladdin Research Equity 2.0** template, which filters a few key risk drivers from thousands of indicators, and flags potential ESG-related risks associated with a given security. This broadens the set of information available to FAE investors, and prompts focus areas for further research and engagement.

Excerpt from Aladdin Research Equity 2.0:

ESG Data				
ESG Rating: BB	Total ESG Score: 3.9	Environment Score: 1.8	Social Score: 5.9	Governance Score: 4.8
Corporate Governance				
Board Accountability	Environmental			
Independent Chair	Biodiversity & Land Use: 2.0			
Negative Director Votes	Carbon Emissions: 6.2			
Gender Diversity	Toxic Emissions and Waste: 4.3			
	Water Stress: 3.2			
	Social			
	Business Ethics and Fraud: 3.7			
	Corruption and Instability: 2.0			
	Health and Safety: 5.7			
	Human Capital Development: 5.0			
	Privacy & Data Security: 0.0			

Trading & Liquidity

The **Global Cash Management** team sought to pioneer an ESG integration approach for its unique asset class by creating a **"Responsible Cash" ratings model**, which follows a systematic approach, combining disparate external data points and internal research to provide a more holistic view on key risks and opportunities for securities in the universe.

Excerpt from Responsible Cash Model:

		Governance Score				
		G1	G2	G3	G4	G5
Environmental and Social Score	ES1	RC1	RC1	RC2	RC3	RC5
	ES2	RC2	RC2	RC3	RC4	RC5
	ES3	RC3	RC3	RC3	RC4	RC5
	ES4	RC4	RC4	RC4	RC4	RC5
	ES5	RC5	RC5	RC5	RC5	RC5

Building Blocks: Example: WFC.

ENVIRONMENTAL SCORE / RATING: 3.99 / E1

SOCIAL SCORE / RATING: 4.193 / S4

ES SCORE (Y-AXIS - is 50/50 of E & S): E3

Governance Score / RATING: 4.66 / G5

ESG RATING: RC5

Note: Lower scores better (higher rank)

Alternatives

Private Equity Partners (PEP) incorporates ESG insights into its standard investment memorandums for both direct co-investments and funds. PEP has developed **ESG Due Diligence Templates**, which include a series of questions related to sector-specific, or general partner-relevant ESG issues. This information is then benchmarked to help distill areas of risk or focus.

Excerpt from PEP ESG Due Diligence Template:

Policies		Does the firm follow a formal ESG policy/ framework?
Identification		If not, please explain why you don't have any formal ESG policy/framework in place
Processes	Contribution	How does the firm identify and manage material ESG risks/issues and opportunities at the portfolio companies' level?
	Monitoring	How does the firm monitor the identified ESG risks/issues? What key performance indicators are used to track ESG improvements achieved?
Disclosures		What is the firm's approach to disclosing material ESG-related risks/issues and ESG performance?

Source: BlackRock, 2020. Case studies are for illustrative purposes only; they are not meant as a guarantee of any future results or experience, and should not be interpreted as advice or a recommendation.

ESG Research & Insights

From scarcity to superabundance of ESG data

ESG data quality is improving rapidly

Company Disclosure

In 2011 ~20% of S&P500 companies disclosed sustainability data

Today >85% provide some sustainability reporting¹

Unstructured Big Data

Rise of big data and machine learning allows investors to leverage sustainability data not self reported by a company

Third-Party Research

ESG data becomes more accessible and digestible for investors, allowing them to more easily integrate ESG into their analysis

1. Source: Governance & Accountability Insurance (G&A), 2017. http://www.ga-institute.com/fileadmin/ga_institute/images/FlashReports/2018/G_A-Flash-S_P500-Chart-2018_600px.jpg

BSI's research framework seeks to translate E, S and G risks and opportunities into investable pillars

Environmental

1. Clean technology
2. Energy production
3. Energy management
4. Water management
5. Waste management

Social

1. Culture
2. Talent management
3. Workers' rights
4. Customer relations
5. Community relations

Governance

1. **Board independence**
2. **Board effectiveness**
3. **Ownership & control**
4. **Business ethics**
5. **Audit, tax, and risk management**

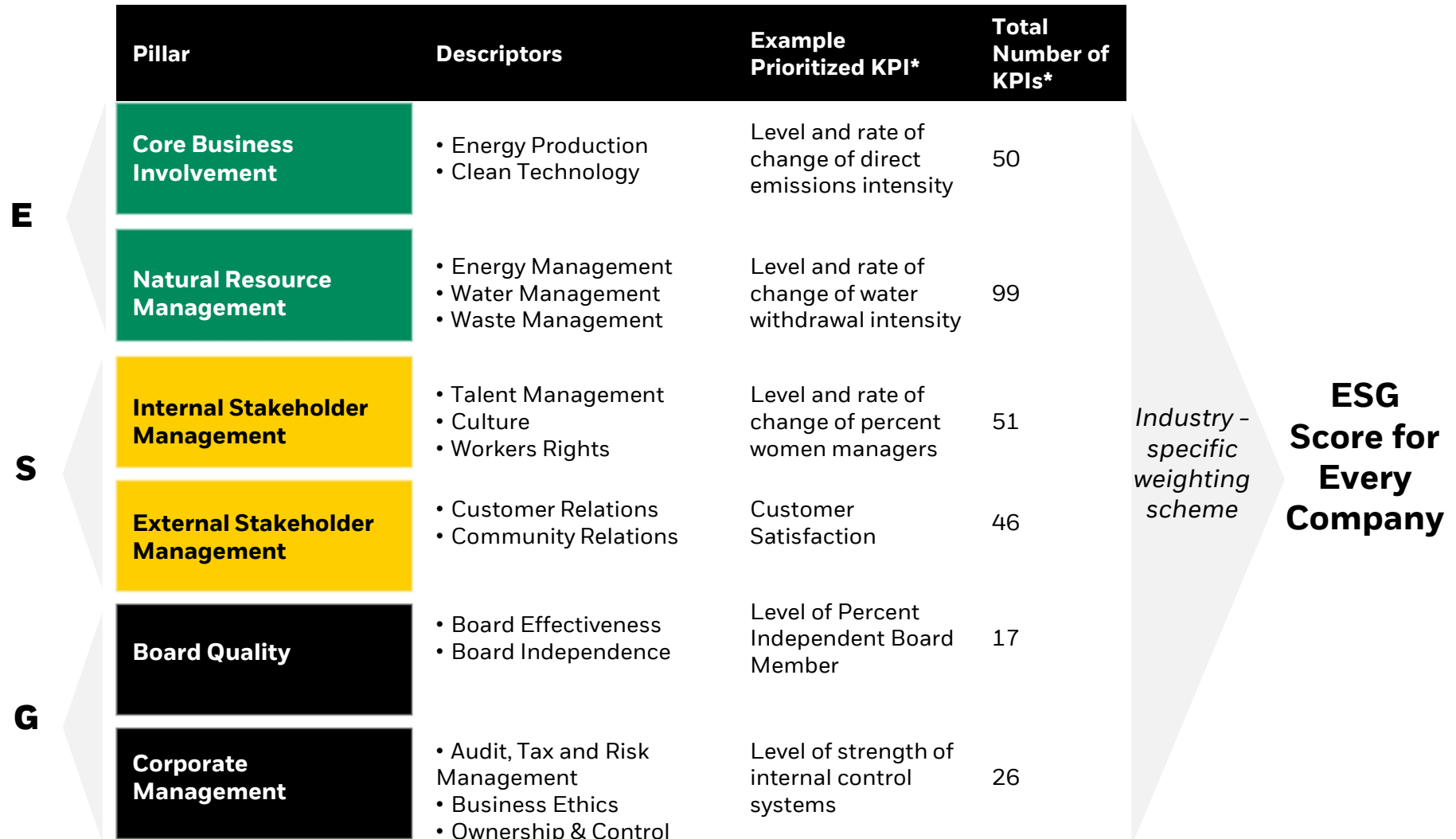


Analyze academic and industry research
Develop high-conviction hypotheses
Aggregate data providers and proprietary insights

Source: BlackRock Sustainable Investing, January 2020.

Methodology Overview

In constructing BlackRock Proprietary ESG scores, we capture multiple data inputs from across providers, prioritize insights, and weight them based on an industry-specific materiality map



Source: BlackRock Sustainable Investing, as of January 2020. For illustrative purposes only.

* KPI represents key performance indicator.

BlackRock's Materiality Matrix

Measuring how descriptors work across market sectors

We combine BlackRock **fundamental views** with **SASB's Materiality Map** and **Empirical Evidence** to determine the weights of 15 descriptors across the market. The goal is to provide better long-term financial insights than currently available from third party ESG scores.

- **Quantitative view** through measuring the relationship between each descriptor score with security returns
- **Qualitative view** through combining BlackRock fundamental views with SASB materiality map.

**Weights
reflect sector
specific
materiality**

**Inspired by
the SASB
framework**

**Enhanced
with
empirical
evidence and
intuition**

Improving the supply of investor-grade sustainability data

BlackRock asks companies to disclose in line with TCFD and SASB by the end of 2020

	TCFD	SASB
Focus	Climate	Broad sustainability, including climate
Audience	Investors and financial stakeholders	Investors and financial stakeholders
Geography	Global	Global
Specificity	Recommendations for all companies, additional guidance for 7 industries	Industry-specific standards for companies in 77 industries
Mandate	Voluntary	Voluntary
Materiality	Financial materiality	Financial materiality
Scope	Global operations	Global operations
Organization	Financial Stability Board appointed group	Independent standards setting group
Our involvement	Founding member of the task force	Founding members of the Standards Board, Investor Advisory Group, Standards Advisory Group
Our alignment	2020e	<u>Reported FY2018</u>

More information at www.fsb-tcf.org and www.sasb.org.

Important notes

Index

It is not possible to directly invest in an unmanaged index. Unless otherwise noted, index returns do not reflect any management fees, transaction costs or expenses. Indexes are unmanaged and one cannot invest directly in an index. Data for time periods prior to the index inception date is hypothetical and is provided for informational purposes only to indicate historical performance had the index been available over the relevant time period. Hypothetical data results are based on criteria applied retroactively with the benefit of hindsight and knowledge of factors that may have positively affected its performance, and cannot account for risk factors that may affect the actual portfolio performance. The index sponsor may make methodology changes from time to time based on its own policies and procedures. Index methodology is available upon request. Back-tested data is calculated by individual index providers and used in analysis until live index data is available. This analysis uses back-tested data from MSCI and Thomson Reuters.

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Risk

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BlackRock Sustainable Investing intends to invest in companies with measurable societal impact outcomes, as determined by BlackRock, and screen out particular companies and industries. This may affect the portfolio's exposure to certain companies or industries and the portfolio will forego certain investment opportunities. The portfolio's results may be lower than other portfolios that do not seek to invest in companies based on expected societal impact outcomes and/or screen out certain companies or industries. BlackRock Sustainable Investing seeks to identify companies that it believes may have a societal impact outcome, but investors may differ in their views of what constitutes positive or negative societal impact outcomes. As a result, the portfolio may invest in companies that do not reflect the beliefs and values of any particular investor.

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