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ESG 101 & Climate Risk Management

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Introduction



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Assurance / Tax / Advisory

AGENDA

- ESG Defined
- ESG's Drivers
- ESG Frameworks & Standards
- How to Get Started Building an ESG Program
- ESG Reporting Examples
- ESG Reporting Best Practices

ESG Defined

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What Is ESG?

Environmental, Social, & Governance

Set of metrics & standards for an organization’s operations that meet growing stakeholder demand for information about an organization’s impacts in these areas & how the organization addresses those impacts & governs itself.



¹Weights per S&P Global’s 2021 Corporate Sustainability Assessment Methodology for Banks

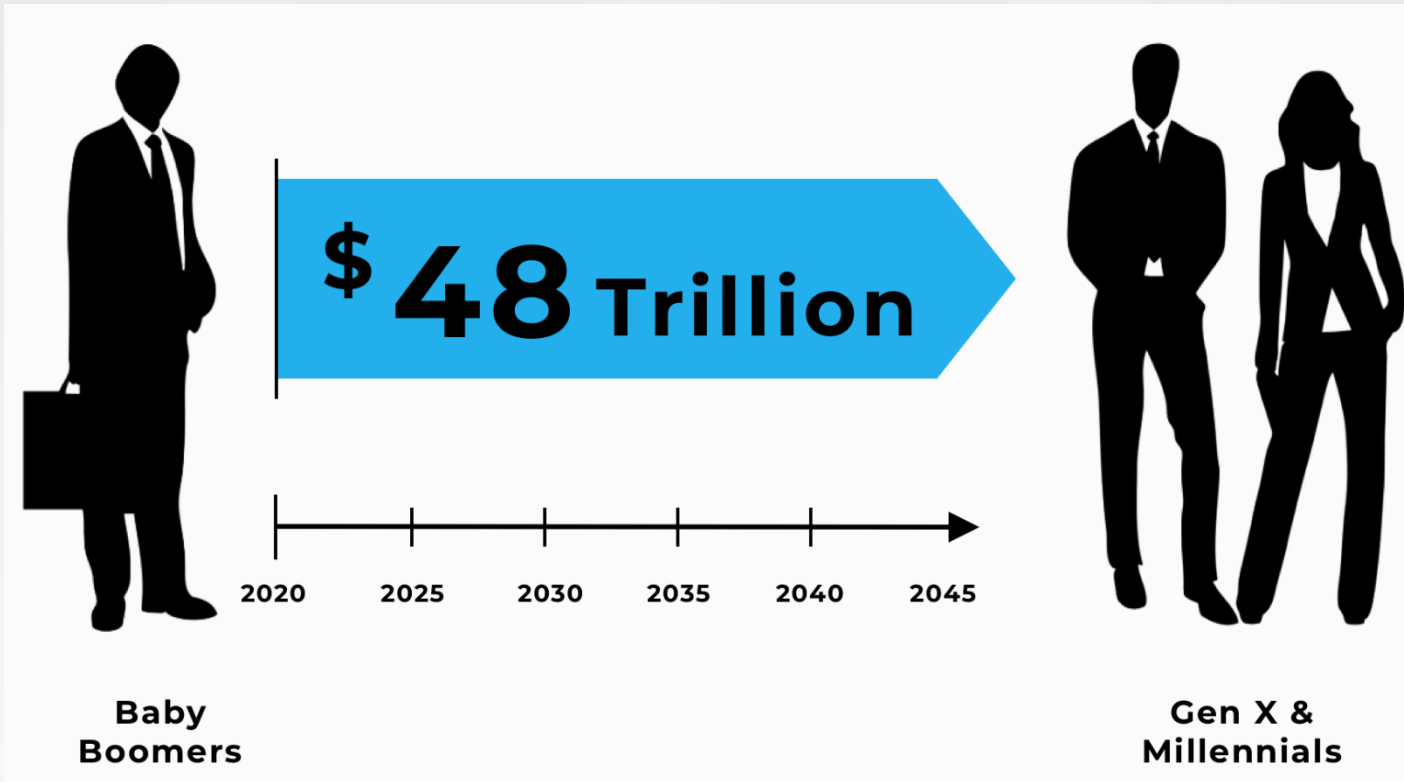
ESG Drivers

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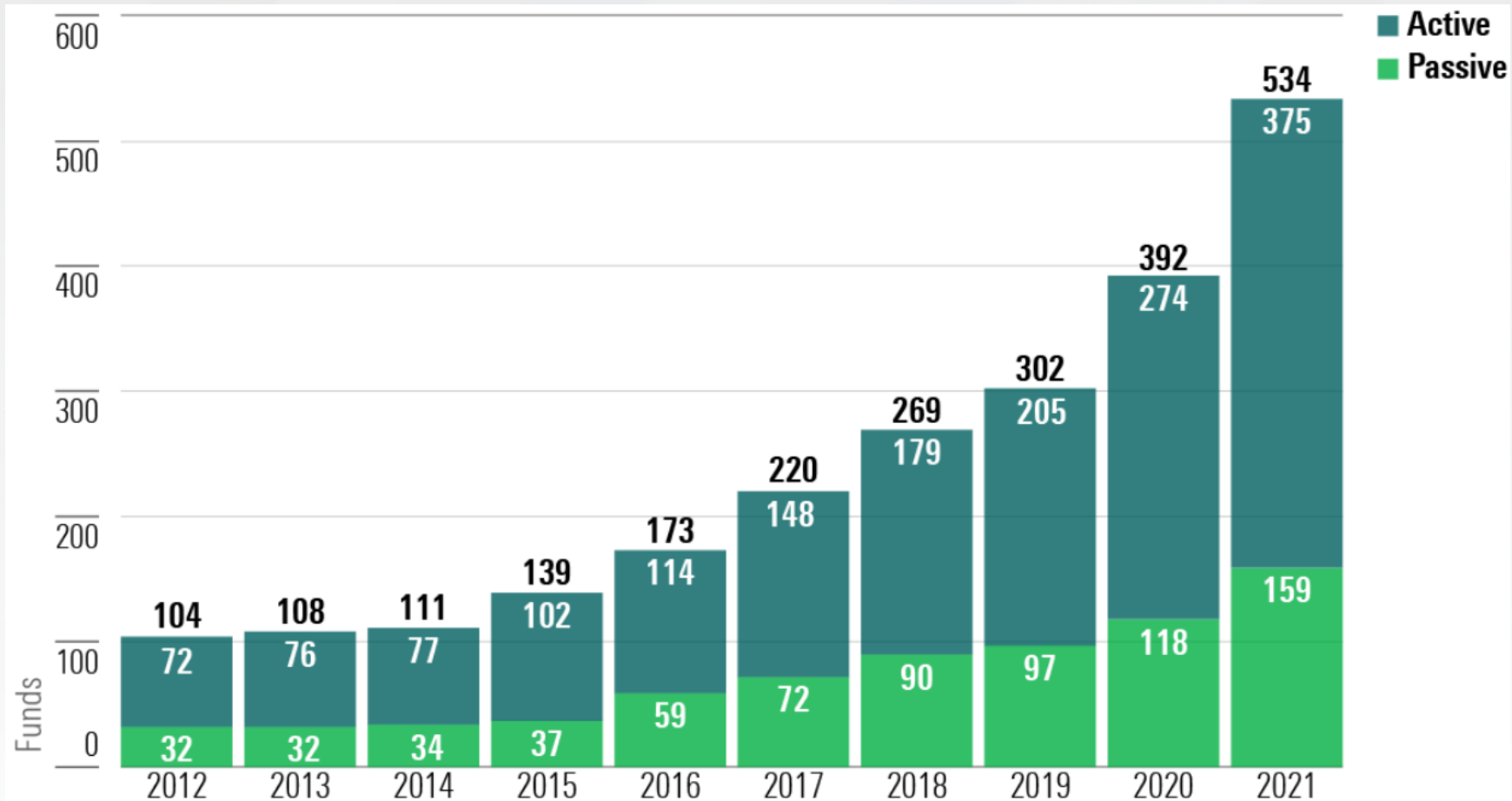
ESG's Drivers – Demographics



- In the U.S., according to Cerulli Associates, over the next 25 years, baby boomers will transfer nearly **\$48 trillion** in assets to their heirs & charities
- This enormous transfer of wealth is believed to be a driving force of ESG in the coming years
- In many major markets, including the U.S. & EU, ESG integration is being seen as part of a fiduciary duty

ESG's Drivers – Sustainable Investing

The Sustainable Funds Universe: A Fivefold Increase in the Past Decade



ESG Drivers – U.S. Commitments

President Biden has pledged that the U.S. will:

- Cut greenhouse gas emissions 50% to 52% by 2030 from 2005 levels
- Have net-zero emissions by 2050

GHG breakdown

- 31% – Manufacturing (cement, steel, plastic, oil refining, etc.)
- 27% – Electricity
- 19% – Agriculture
- 16% – Transportation
- 7% – Heating, cooling, & refrigeration

Source: Rhodium Group

ESG Drivers – Regulatory Developments

May 5, 2021 – Presidential Executive Order on Climate-Related Financial Risk

- Orders development of federal lending, underwriting, & procurement requirements

March 4, 2021 – SEC Established Enforcement Task Force Focused on Climate & ESG Issues

October 21, 2021 – Financial Stability Oversight Council (FSOC) Report: Climate-Related Financial Risks

- “Climate change is an emerging and increasing threat to U.S. financial stability”
- Outlines regulatory recommendations for financial regulators

March 21, 2022 – SEC Proposed Mandatory Climate Reporting

March 30, 2022 – FDIC Issued Principles for Climate-Related Financial Risk Management for Large Financial Institutions

SEC Proposed Climate Reporting Rule

Intent



- To give investors clear, consistent, & comparable climate-related information

Governance



- Who on the board oversees climate-related risks
- What is their expertise
- How are they informed
- Frequency of discussion
- Involvement in target & goal setting
- Management's role & expertise

Strategy



- Physical risks, acute & chronic
- Transition risks, acute & chronic
- Impact on strategy, business model, outlook, capital allocation
- Affect on financial statements

SEC Proposed Climate Reporting Rule cont.

Risk Management



- Process for identifying, assessing, & managing risks
- If have a transition plan:
 - Board involvement
 - Actions taken in the reporting year
 - Metrics & targets used to measure progress

Financial Metrics



- Financial impacts of
 - Severe weather events
 - Transition activities
- Expenses & capital expenditures
 - To mitigative weather events
 - For transition activities
- Impacted estimates & assumptions

GHG Emissions



- Scope 1 & Scope 2 GHG emissions
- Scope 3 emissions, if material or included in targets and goals
- Gross emission & intensity

Types of Emissions

Scope 1: Emissions a company generates

Scope 2: Emissions a company creates indirectly, for example by using electricity

Scope 3: Emissions generated up & down the company value chain, including by suppliers, customers, financed emissions

SEC Proposed Climate Reporting Rule Schedule

Registrant Type	Disclosure & Attestation Compliance Dates (assuming a December 2022 effective date and December 31, fiscal year end)			
	Scope 1 &2 Emissions and Proposed Disclosures	Attestation – Scope 1 &2 GHG Emissions		Scope 3 Emissions Disclosures, if material or in reduction target or goal
		Limited Assurance	Reasonable Assurance	
Large Accelerated	Fiscal year 2023 (filed in 2024)	Fiscal year 2024 (filed in 2025)	Fiscal year 2026 (filed in 2027)	Fiscal year 2024 (filed in 2025)
Accelerated	Fiscal year 2024 (filed in 2025)	Fiscal year 2025 (filed in 2026)	Fiscal year 2027 (filed in 2028)	Fiscal year 2025 (filed in 2026)
Non-Accelerated	Fiscal year 2024 (filed in 2025)	Exempted	Exempted	Fiscal year 2025 (filed in 2026)
Smaller Reporting Company	Fiscal year 2025 (filed in 2026)	Exempted	Exempted	Exempted

What Does Climate Change Have to Do with Banking?

- “Climate risk is likely to have a major influence on banks' loan quality, and depending on how climate change unfolds, and on the policy response to it, the losses that ensue could be substantial.”
- “Our analysis shows that climate risk is likely a key determinant of banks' loan quality and creditworthiness.”
- “Loan losses could be around 20% higher under the most extreme climate scenario.”

Source: Moody's Investors Service on October 4, 2021

Climate change creates opportunities and challenges for the banking industry.

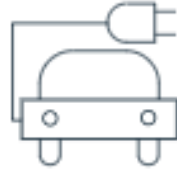
Opportunity: Financing a green agenda



Transformation of energy production toward renewables



Plant refurbishments to avoid or capture and store carbon emissions



Electrification of transport and automation of mobility

Up to \$500 billion in annual adaptation costs¹

Challenge: Protecting balance sheets from uncertainty



Real-estate market collapse in low-lying areas



Increased risk of major crop failures with implications for meat and dairy producers






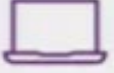


Closures of coal-powered power plants before end of useful life

For banks in the European Union, up to 15% of the balance sheet is at risk²

¹ Costs until 2050, according to the UN *Adaptation Gap Report* (2018).

² Based on analysis of 46 sample EU banks and their portfolio composition in industries and geographies likely affected by physical and transition risks.

Opportunities Related to Global Systemic Risk

Global systemic risk		Investment gap (per annum)	Transformational investment examples
Climate change		\$2.4 trillion ⁶	Cleantech infrastructure, renewable energy, sustainable natural resources
Water security		\$670 billion ⁷	Food production, energy production, water quality infrastructure
Geopolitical stability		Cross-trend opportunities	Infrastructure, renewable energy, climate-resilient infrastructure, automated manufacturing
Technological evolution		\$1.7 trillion ⁸	Tech-related venture capital, electric vehicles, renewable energy, global connectivity, battery storage, mobile networks, fintech
Demographic shifts		\$1.5 trillion ^{9, 10}	Education, healthcare, infrastructure, care of ageing populations
Low and negative real long-term interest rates		Cross-trend opportunities	Venture capital, distressed debt, infrastructure
Total*		\$6.27 trillion	

*Not accounting for overlap between trend opportunities.

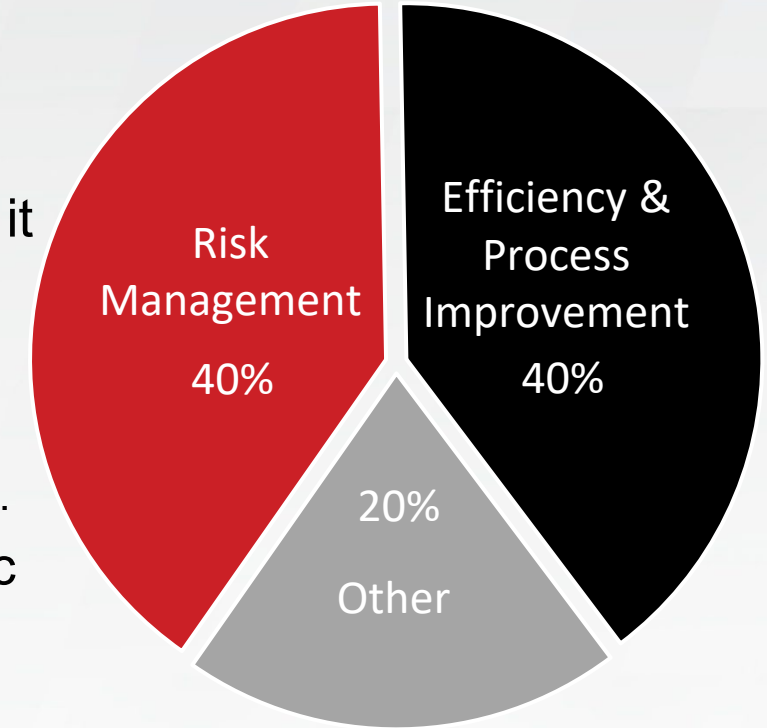
ESG Frameworks & Standards

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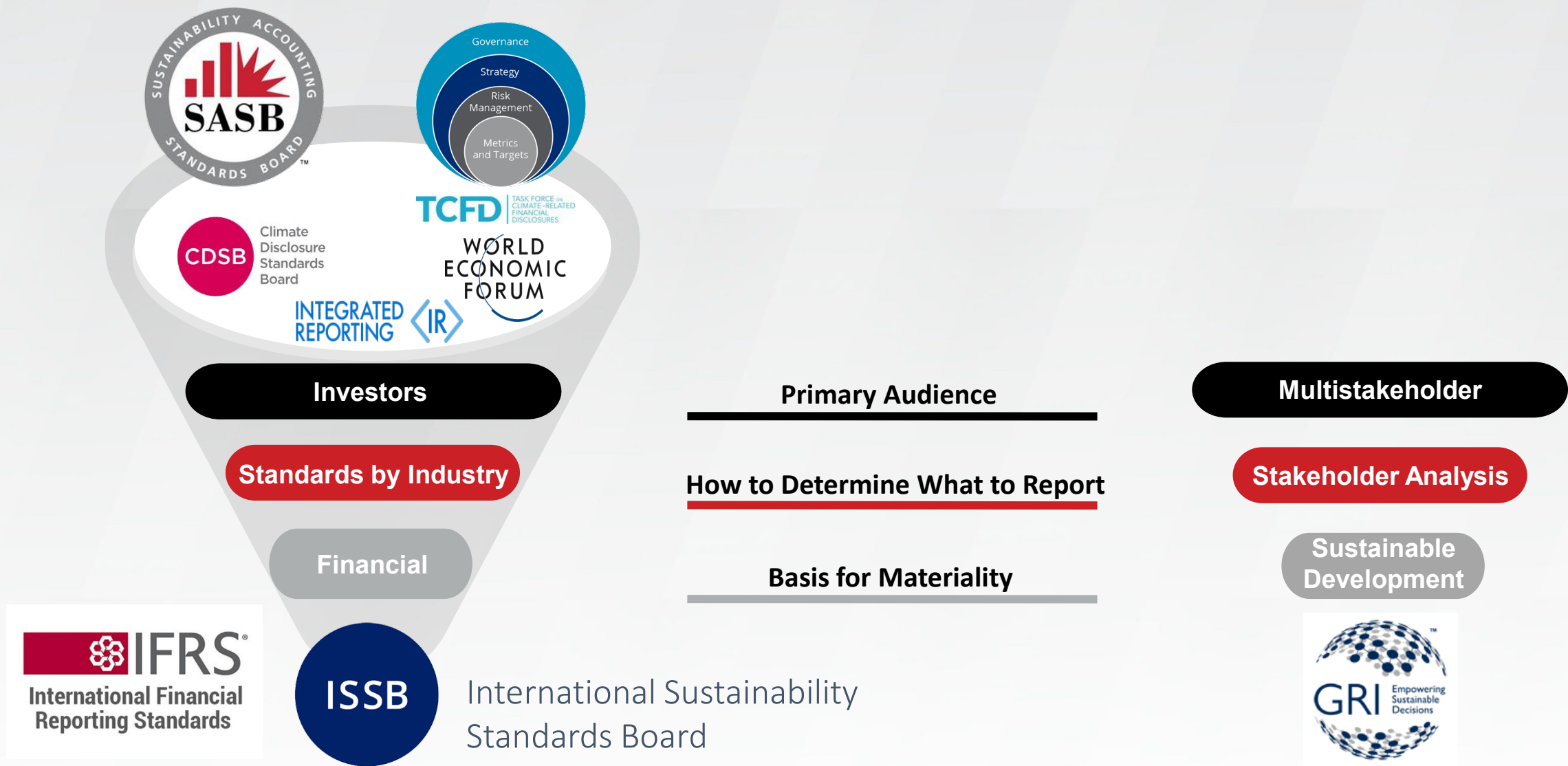
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Common ESG Perspectives & Assumptions

- Public disclosure of performance data leads to improved performance
- Only public information is considered
 - If an organization isn't disclosing how they manage a risk, it is assumed that the organization is not managing that risk
 - Exceptions
 - Some S&P Global, Fitch, & Moody's ESG ratings
 - Customers who want details for procedures, training, audit results, etc.
 - Organizations are rated based on machine readable public information
 - ESG information needs to be consolidated into a report
- Governance, Governance, Governance



Consolidating ESG Frameworks & Standards



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Task Force on Climate-Related Financial Disclosure (TCFD)



Governance

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

Strategy

The actual & potential impacts of climate-related risks & opportunities on the organizations businesses, strategy, & financial planning

Risk Management

The process used by the organization to identify, assess, & manage climate-related risks

Metrics & Targets

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



Sustainability Accounting Standards Board (SASB)

- Standard setting process modeled after FASB
- Organized by industry
- Identify ESG topics most likely to be financially important for an industry sector
- Intended for an investor audience
- Unique standards for over 70 industries
- Allows for comparability between companies within the same industry

Sustainability Disclosure Topics & Accounting Metrics – SASB

Topic	Accounting Metric	Category	Unity of Measure	Code
Data Security	(1) Number of data breaches, (2) percentage involving personally identifiable information (PII), (3) number of account holders affected ^[2]	Quantitative	Number, Percentage (%)	FN-CB-230a.1
	Description of approach to identifying & addressing data security risks	Discussion & Analysis	n/a	FN-CB-230a.2
Financial Inclusion & Capacity Building	(1) Number & (2) amount of loans outstanding qualified to programs designed to promote small business & community development ^[3]	Quantitative	Number, Reporting Currency	FN-CB-240a.1
	(1) Number & (2) amount of past due & nonaccrual loans qualified to programs designed to promote small business & community development	Quantitative	Number, Reporting Currency	FN-CB-240a.2
	Number of no-cost retail checking accounts provided to previously unbanked or underbanked customers	Quantitative	Number	FN-CB-240a.3
	Number of participants in financial literacy initiatives for unbanked, underbanked, or underserved customers ^[4]	Quantitative	Number	FN-CB-240a.4

^[2] Note to **FN-CB-230a.1**- Disclosure shall include a description of corrective actions implemented in response to data breaches

^[3] Note to **FN-CB-240a.1**– Disclosure shall include a description of how the entity’s results of the Community Reinvestment Act (CRA) Examinations are integrated into its financial inclusion & capacity building strategy

^[4] Note to **FN-CB-240a.4**– Disclosure shall include a description of financial literacy initiatives

Sustainability Disclosure Topics & Accounting Metrics – SASB

Table 1. Sustainability Disclosure Topics & Accounting Metrics (continued)

Topic	Accounting Metric	Category	Unity of Measure	Code
Incorporation of ESG Factors in Credit Analysis	Commercial & industrial credit exposure, by industry	Quantitative	Reporting currency	FN-CB-410a.1
	Description of approach to incorporation of environmental, social, & governance (ESG) factors in credit analysis	Discussion & Analysis	n/a	FN-CB-410a.2
Business Ethics	Total amount of monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behavior, market manipulation, malpractice, or other related financial industry laws or regulations ^[5]	Quantitative	Reporting currency	FN-CB-510a.1
	Description of whistleblower policies & procedures	Discussion & Analysis	n/a	FN-CB-510a.2
Systemic Risk Management	Global Systemically Important Bank (G-SIB) score, by category ^[6]	Quantitative	Basis points (bps)	FN-CB-550a.1
	Description of approach to incorporation of results of mandatory & voluntary stress tests into capital adequacy planning, long-term corporate strategy, & other business activities	Discussion & Analysis	n/a	FN-CB-550a.2

[5] Note to **FN-CB-510a.1**- The entity shall briefly describe the nature, context, & any corrective actions taken as a result of monetary losses

[6] Note to **FN-CB-550a.1**– The entity shall describe whether the Global Systemically Important Bank (G-SIB) score is calculated by the entity or obtained from regulatory authorities & whether the entity is required to report the underlying data to the regulators

Sustainability Disclosure Activity Metrics – SASB

Activity Metric	Category	Unity of Measure	Code
(1) Number & (2) value of checking & savings accounts by segment: (a) personal & (b) small business	Discussion & Analysis	Number, Reporting Currency	FN-CB-000.A
(1) Number & (2) value of loans by segment: (a) personal, (b) small business, & (c) corporate ^[7]	Quantitative	Number, Reporting Currency	FN-CB-000.B

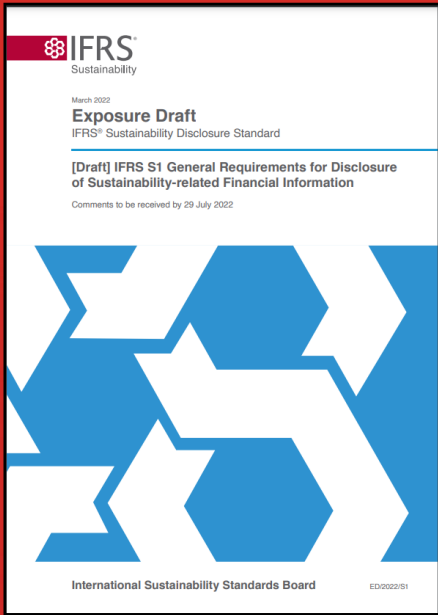
[7] Note to **FN-CB-000.B** – Mortgage loans as well as revolving credit loans shall be excluded from the scope of disclosure

ISSB Exposure Draft Standards

1. General Requirements for Disclosure of Sustainability-Related Financial Information
 - Other **ISSB Standards** set specifics
 - Directs preparers to **SASB Standards**, in absence of IFRS standard
2. Climate-Related Financial Disclosures
 - Incorporates **TCFD recommendations**
 - Industry-specific metrics based on **SASB Standards**

Both

- Same reporting period as financial statements
- Reported at the same time as financial results
- Disclosure themes
 1. Governance
 2. Strategy
 3. Risk management
 4. Metrics & targets





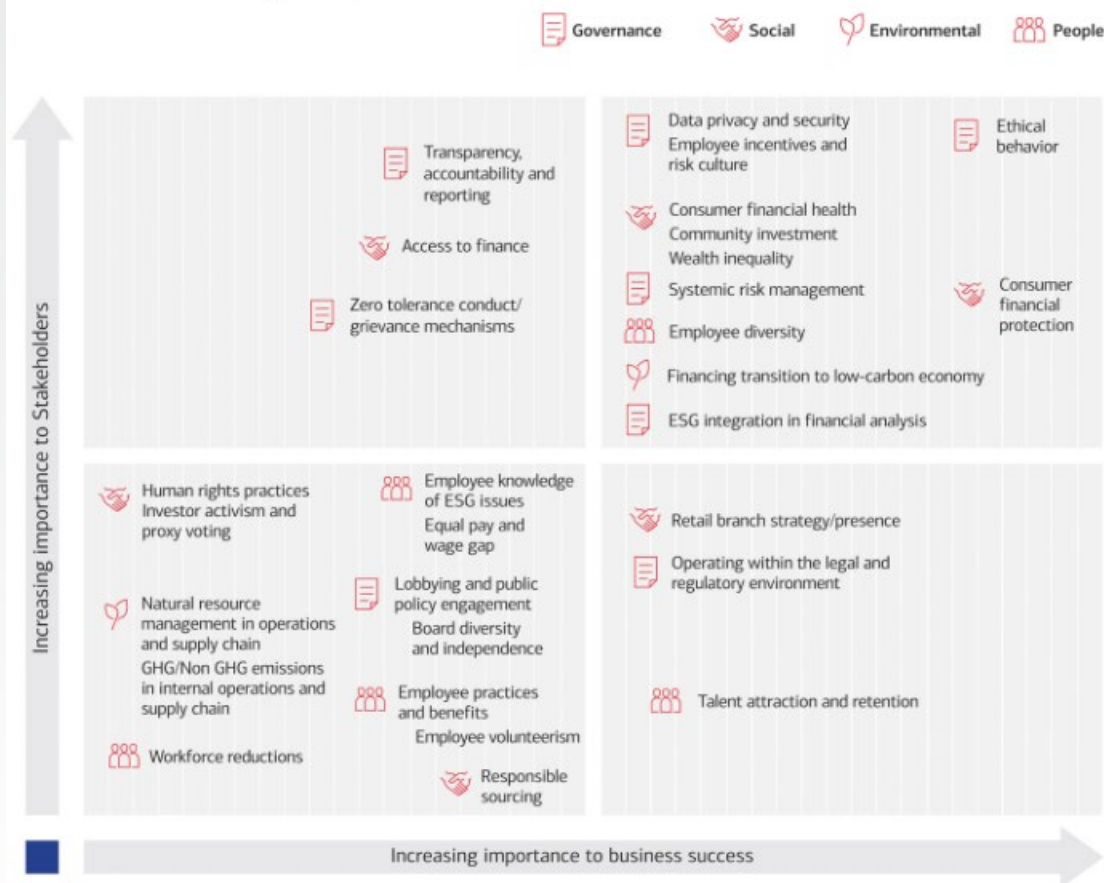
Global Report Initiative

- Identify material topics by
 - Significance of the organization's effects on the economy, environment, & society, which can indicate its contribution, positive or negative, to sustainable development
 - Substantive influence on the stakeholder assessments & decisions
- Takes into account
 - Employee & shareholder interests & expectations
 - Interests & topics raised by contractors, suppliers, local communities, vulnerable groups, & civil society

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Bank of America

ESG Materiality Map



How to Get Started Building an ESG Program

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AICPA ESG

Recommendations

Steps Clients Can Take for ESG Reporting & Assurance

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There is a significant financial interest in reported ESG information, so the credibility & reliability of that information is essential

Apply financial reporting rigor to measurement & reporting of ESG information

1. Establish governance

- Incorporate ESG into ERM processes
- Establish board oversight over ESG matters
- Pick ESG reporting frameworks
- Determine which ESG KPIs are most relevant & important

2. Apply financial reporting processes to ESG data

- Assess data source types
- Determine whether policies exist so that data are
 - Reasonable & accurate
 - Timely & reliable
 - Consistent & comparable
- Develop & document internal controls for data gathering & reporting
- Engage a CPA firm to perform a readiness assessment to help prepare for assurance

Source: <https://www.aicpa.org/press/pressreleases/2021/leading-accounting-association-releases-six-2021-esg-trends-for-accounting-and-finance-professionals.html>

How to Get Started – Four-Phase Approach for Building an ESG Program



ESG Reporting Examples

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ESG Strategy

“The Rule of 3” Is
Commonly Used

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Low-Carbon Transition



Accelerate the transition to a low-carbon economy through our \$250 Billion Environmental Finance Goal

Finance and facilitate environmental solutions over five years in support of:

- Renewable Energy
- Clean Technology
- Sustainable Transportation
- Energy Efficiency
- Green Buildings
- Water Quality and Conservation
- Circular Economy
- Sustainable Agriculture and Land Use

Climate Risk



Measure, manage and reduce the climate risk and impact of our client portfolio

Enhance our TCFD implementation and disclosure through policy development, portfolio analysis and stakeholder engagement

Sustainable Operations



Reduce the environmental footprint of our facilities and strengthen our sustainability culture

Continue to minimize the impact of our global operations through operational footprint goals, and further integrate sustainable practices across the company

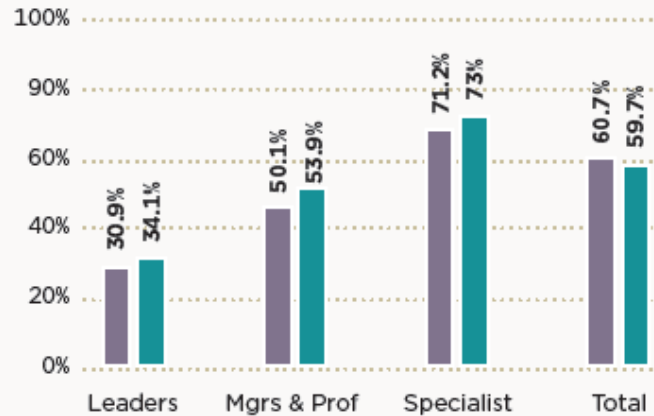
Charts & Infographics

Workforce Data

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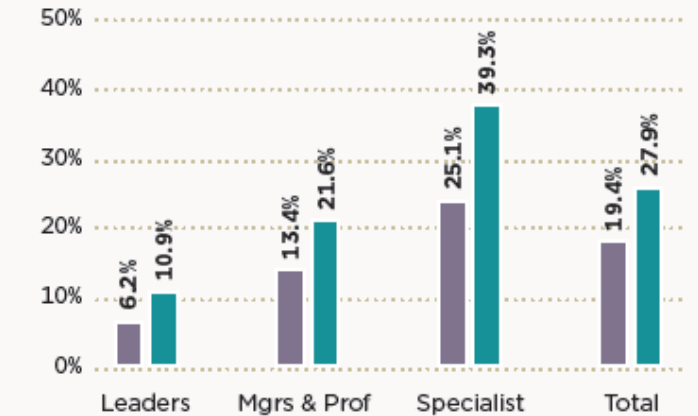
Representation of Women Across the Organization

2010 2020



Representation of POC Across the Organization

2010 2020



OUR WORKFORCE

Generational Workforce Breakdown by Birth Year



- Baby Boomers (1946-1964) - 19.9%
- Generation X (1965-1980) - 42.6%
- Generation Y (1981-1996) - 36.1%
- Generation Z (1997 - onwards) - 1.4%

ESG Data Tables

Increasingly the Most Important Part of ESG Reports

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ESG Data

Topic	Accounting Metric	Units	2018	2019	2020	SASB(a)	GRI (Core)(b)	SDGs
Air Quality	Air emissions for the following pollutants:							
	NO _x (excluding N ₂ O)†	Thousand metric tons	58.7	57.9	52.2	EM-MD-120a.1 EM-EP-120a.1	305-7	3 11 12
	SO _x †	Thousand metric tons	0.3	0.4	0.3	EM-MD-120a.1 EM-EP-120a.1	305-7	3 11 12
	VOCs†	Thousand metric tons	13.7	14.4	12.7	EM-MD-120a.1 EM-EP-120a.1	305-7	3 11 12
	PM ₁₀ †	Thousand metric tons	1.3	1.4	1.4	EM-MD-120a.1 EM-EP-120a.1	305-7	3 11 12
Supply Chain Management	Percentage of small business, diverse, and veteran-owned supplier procurement spend vs. total supplier procurement spend†	%	-	31 %	41 %	- -	414-1	8 9
	Total small business, diverse, and veteran-owned supplier spend†	Millions	-	\$1,593	\$1,675	- -	414-1	8 9
	Percentage of service suppliers subject to performance audits†	%	100%	100%	100%	- -	- -	- -
	Number of service suppliers audited†	#	172	248	569	- -	- -	- -
	Percentage of service suppliers	%	5%	7%	17%	- -	- -	- -
Prevention of Corruption and Bribery	Legal or regulatory fines, settlements, or penalties associated with bribery and corruption†	Dollars	\$0	\$0	\$0	EM-EP-510a.2	205-2	16
Political Contributions	Contributions to political campaigns, candidates, and parties†	Thousands	\$0	\$0	\$0	- -	415-1	16
	Payments to lobbying organizations†	Thousands	\$575	\$265	\$197	- -	415-1	16
	Trade association dues†	Thousands	\$2,502	\$2,523	\$2,680	- -	415-1	16
	Non-deductible portion of trade association dues attributed to lobbying and political expenditures†	Thousands	\$180	\$225	\$212	- -	- -	- -
	Payments made in relation to ballot measures†	Thousands	\$10	\$0	\$0	- -	- -	- -
Employee Training & Development	Hours of employee development training†	Thousand hours	211	228	351	- -	404-1	8 9
	Total investment in employee training†	Millions	-	-	\$27	- -	- -	8 9

ESG Reporting Best Practices

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ESG Reporting Best Practices

Commit to getting value out of the process & the data that comes from it

Engage with investment community to understand how they are integrating ESG into investment decisions

Implement controls over ESG reporting with the same discipline & controls over financial reporting

Start reporting with ESG data already collected for other purposes

Use your financial reporting processes as a model to get started

Questions?



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