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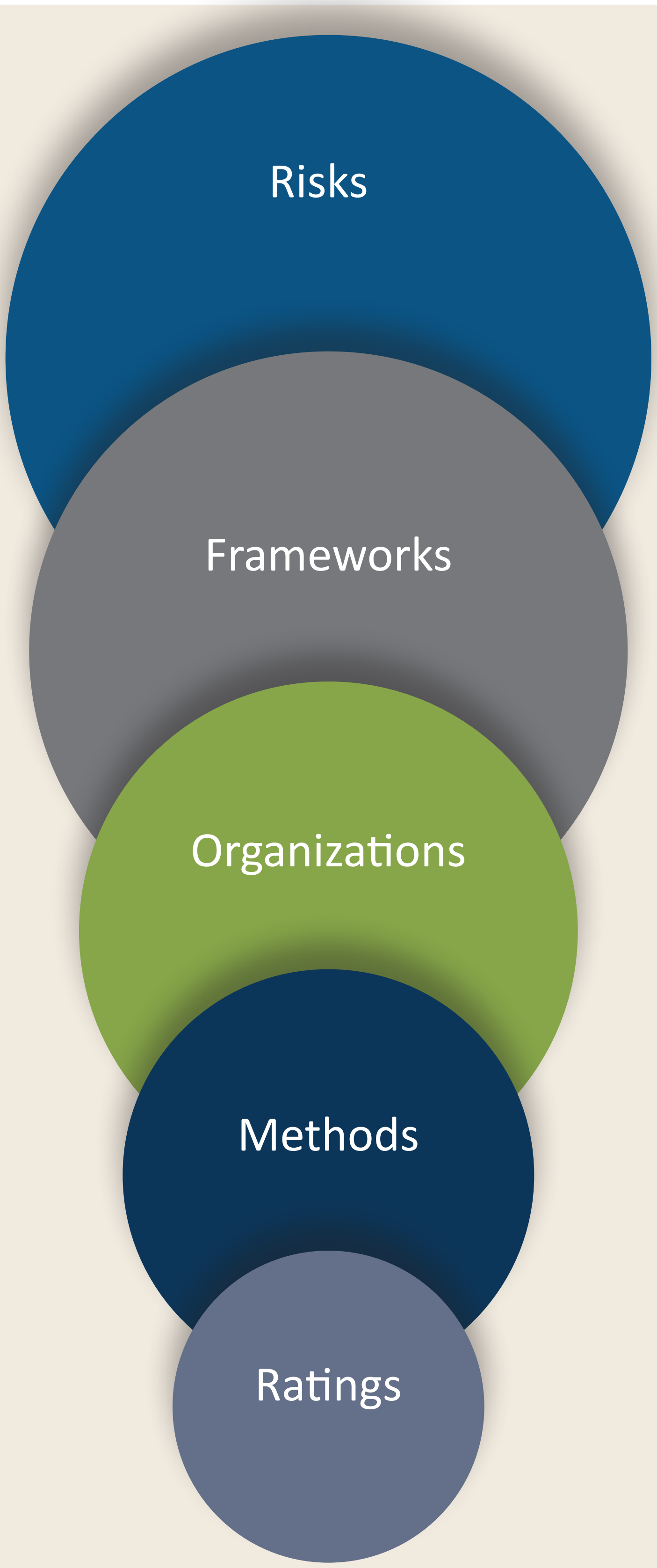
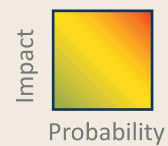
Mapping the Environmental, Social, and Governance (ESG) Landscape

Evaluating a company's performance in Environmental, Social, and Governance (ESG) has evolved as an approach for the financial community to determine the potential impact these three areas may have on an investment. ESG focuses on off-balance sheet risks. NCASI has mapped the landscape of ESG as it relates to environmental aspects relevant to the forest products industry. This is an interactive document with embedded hyperlinks to online material. NCASI intends to revise this document as the ESG landscape changes.

Five Layers of the ESG Landscape



ESG evaluates a company's non-financial investment risks that may have an impact on a company's resilience, long-term viability, or other factors relevant to investors. Risk avoidance is the primary objective of many ESG approaches (avoiding red and yellow areas of the risk diagram to the right). ESG creates opportunities to reduce high risks while also identifying areas where companies can deliver additional investor value.

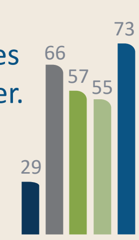


Frameworks enable consistency and transparency. They influence ESG by providing high-level, multi-sector reporting guidelines and requirements that are tied to underlying ESG risks. These frameworks serve as standards for reporting information in a manner that allows comparability of a company's performance over time, and in some cases, comparability from one company to another.

ESG organizations take information about a company and convert it into a rating. The rating can be a stand-alone score or a ranking among peers based on available environmental performance information.

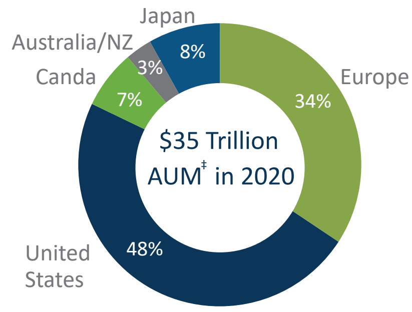
Each ESG organization takes a different approach to rating a company's ESG performance. While organizations provide methodology documentation about their approach, the information is insufficient to objectively recreate their results.

The intention of ESG ratings is to communicate a company's performance, often as a single value. Given that each ESG organization uses disparate data sources and proprietary methods, ratings often differ. This is exemplified by ratings shown to the right for a single company from various ESG organizations.



Mapping the Environmental, Social, and Governance Landscape

ESG has evolved from environmental regulation, information availability, and investment pressure. The timeline below highlights some of the milestones that have made ESG what it is in 2022.



1970 | Environmental Regulation

1990 | Social Index Funds

2015 | ESG Growth

1970
Social environmental unrest results in the 1st Earth Day in the U.S.*
Dawn of the U.S. EPA and end-of-pipe regulations.*

1987
"Sustainable Development" is coined in the UN's report, Our Common Future.*

1990s

1990
First financial social index is created with the Domini 400; now the MSCI KLD 400.*

1992
Earth Summit in Rio de Janeiro launched the UN's work on climate change (UNFCCC).*

1994
"Triple Bottom Line" sustainability framework coined by John Elkington.*

1997
Global Reporting Initiative (GRI) and the Kyoto Protocol launch.

1999
Dow Jones Sustainability Index launch.*

2000s

2002
Carbon Disclosure Project (now CDP) launches voluntary GHG reporting.*

2004/05
"ESG" is coined by the Global Compact and the Freshfields Report argues ESG is a fiduciary responsibility.

2009
Sustainalytics is formed via merger of multiple ESG focused rating agencies.*

2010s

2010
MSCI (Formerly Morgan Stanley Capital International), one of the largest ESG rating companies, focuses on off-balance sheet risk and associated funds.*
International Integrated Reporting Council (IIRC) creates a system for reporting strategy, governance, and performance.*

2011
Sustainability Accounting Standards Board (SASB) begins work on a common reporting framework for financial impacts of sustainability.*

2015
Task Force on Climate-Related Financial Disclosures (TCFD) develops voluntary guidance for disclosing climate-related information.*
UN Sustainable Development Goals (SDGs) launch.*

2019
BlackRock alerts CEOs that ESG issues will be material to corporate valuations.*

2020s

2020
BlackRock identifies 244 companies not making sufficient progress on integrating climate risk and takes voting action against shareholder proposals for 53 companies.*
IIRC and SASB announce merger to form the Value Reporting Foundation (VRF), S&P Global acquires RobecoSAM, and Morningstar acquires Sustainalytics.

2021
European Commission launches the Sustainable Finance Disclosure Regulation (SFDR) which imposes mandatory ESG disclosure obligations for asset managers and financial markets.*
International Financial Reporting Standards (IFRS) launches International Sustainability Standards Board (ISSB) – consolidating VRF and Carbon Disclosure Standards Board (CDSB) of CDP. The London Stock Exchange acquires Refinitiv.*

2022
The Taskforce on Nature-related Financial Disclosures (TNFD) proposes voluntary risk management and disclosure framework for organizations to report and act on evolving nature-related risks.*

* = Linked resource

‡AUM = Assets Under Management (i.e. financial investments)

Risks Set ESG Priorities

Frameworks Influencing ESG

Influential ESG Organizations

Array of Methodologies for ESG Rating

ESG Rating Comparisons

NCASI helps Member Companies understand and address environment risks (E in ESG) for the forest products industry. The diagram below displays the predominant environmental risks in the innermost ring. The outer ring lists opportunities associated with each risk. The ring between risks and opportunities provides links to relevant NCASI resources to help bridge the gap by addressing risks and unlocking opportunities. Some resources can address multiple risks and opportunities.

* = Linked resource

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Listed in the table below are large, voluntary, overarching frameworks that set standards, define baseline criteria, or have become an integral part of the ESG landscape for forest products companies in North America. The objective of these frameworks is to enable consistency and transparency in reporting ESG information. Other efforts are underway to provide guidance and requirements for ESG reporting from the World Economic Forum, the U.S. Securities and Exchange Commission, and the European Union, among others.

Framework	Focus	Function
CDP	CDP (formerly the Carbon Disclosure Project) develops questionnaires focused on climate, water, and forests, then publicly scores respondents.	CDP develops structured questionnaires to provide climate-related scores to investors and the public. Over 13,000 companies annually disclose data to CDP. One of the 16 sectors with sector-specific questions is the forest products industry.
GHG Protocol	The WRI/WBCSD Greenhouse Gas Protocol (GHG Protocol) develops global standards for corporate GHG emissions, offsets, and sequestration.	The GHG Protocol includes standards for direct emissions (Scope 1), indirect emissions (Scope 2 and Scope 3), and emission reduction and sequestration projects, with additional sector-specific accounting frameworks, tools, and guidance for the land sector / forestry.
GRI	The Global Reporting Initiative (GRI) is the first global framework for sustainability reporting standards.	GRI is widely used with about 5,000 registered reports. GRI has Universal and Sector-specific Standards. Specific standards are under development, including “Forestry, logging, and production of pulp and paper”.
ISSB	The International Sustainability Standards Board (ISSB) is in the process of setting global baseline ESG-related disclosure standards for investors and capital markets.	Part of the International Financial Reporting Standards (IFRS) foundation, ISSB is a consolidated organization of the Climate Disclosures Standard Board (CDSB) and the Value Reporting Foundation (VRF). VRF houses the International Integrated Reporting Council (IIRC) and SASB Standards.
TCFD	The Task Force on Climate-Related Financial Disclosures (TCFD) develops financial disclosure recommendations on climate risk, strategy, and governance.	TCFD recommendations are used voluntarily by companies to provide investors with more consistent information on their financial risk from climate change. CDP operationalizes TCFD’s recommendations by incorporating them into standardized disclosure questions.

UN Sustainability Development Goals (SDGs)

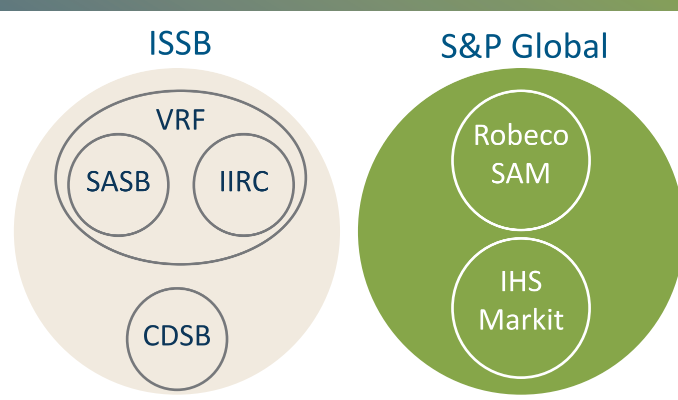
Adopted by all United Nations Member States in 2015, the UN Sustainable Development Goals (SDGs) are a global shared blueprint to achieve objectives in 17 goals with 169 specific targets by 2030. SDGs provide a framework and common language for companies to communicate and act on ESG-related topics. The broad scope of the SDGs covers improving health and education, reducing inequality, spurring economic growth, addressing climate change, preserving oceans and forests, and providing a baseline context for building ESG frameworks. For example, GRI has tools for integrating the SDGs into reporting.

There are numerous organizations that score, rate, and rank companies on their ESG performance. Listed below are some prominent organizations leading the industry, along with their unique aspects in the ESG space.

Organization	Influence	Differentiaion
Arabesque	Recently established with a global focus. Catering to asset managers needing real-time ESG scoring and asset management.	Artificial Intelligence (AI) based platform.
Bloomberg	Longstanding financial data platform catering to asset managers, brokers, and corporations with ESG data coverage of over 11,000 companies.	Broad financial data platform with ESG drill-down capabilities.
ISS	Global coverage catering to institutional investors for corporate and national level ESG, social, and environmental risks and opportunities.	Broad off-balance sheet risk assessment including SDGs.
Moody's	Multi-sectoral credit assessments that affect the cost of capital by establishing credit worthiness and risk of doing business for asset managers.	Integration of ESG information into credit ratings.
MSCI	Extensive ESG coverage with multiple climate and ESG stock and bond indices along with ESG, climate, and decarbonization ratings for companies and funds.	Public ESG ratings and sector materiality mapping.
Refinitiv	Built-in access to the investment community for its ESG scoring products from its owner, the London Stock Exchange.	Provides some control for companies by allowing edits to historic data.
S&P Global	Globally recognized credit ratings. Acquisition of IHS Markit and RobecoSAM provide extended reach in the ESG investment community.	Analyst reports combine multiple aspects of a company for investors.
Sustainalytics	One of the first organizations to rank and score a company's off-balance sheet risks. Acquisition by Morningstar enables broader access to investors.	Simplified peer ranking of managed and unmanaged ESG risks.

Moving Towards Consistency

There has been a proliferation of ESG frameworks and organizations. Mergers and acquisitions have accelerated recently with the increase of ESG in financial dialogue and the growing need for consistency among frameworks and rating organizations. Examples of this trend are pictured to the right—the International Financial Reporting Standards (IFRS) foundation's ISSB consolidation of other frameworks, and S&P Global's acquisition of rating organizations



VRF: Value Reporting Foundation (consolidated SASB and IIRC)
SASB: Sustainability Accounting Standards Board
IIRC: International Integrated Reporting Council
CDSB: Climate Disclosure Standards Board

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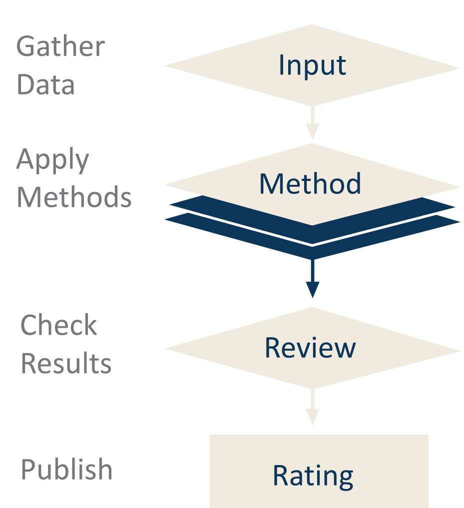
Organizations generate ESG products by first acquiring raw data through surveys, gathering online published information (scraping), or acquiring it from other organizations. Data are analyzed with proprietary models and methods that conclude in an ESG rating, score, or ranking. For the organizations listed below, NCASI has undertaken a qualitative assessment of the apparent use of approaches for acquiring and analyzing data. Checkmarks indicate relative extent of application of each approach from 1-3 (1 = somewhat, 2 = moderate, 3 = extensive) for a given organization.

Method & *Approach*	**Analyst** *Human*	**Scrape** *Automated*	**Survey** *Request*	**AI/ Quant** *Algorithms*	**Buy** *Purchased*
Arabesque	✓	✓✓✓		✓✓✓	
Bloomberg	✓✓	✓✓		✓✓	✓✓
ISS	✓	✓✓✓		✓✓	
CDP			✓✓✓		
Moody’s	✓✓	✓✓✓	✓	✓	
MSCI	✓✓	✓✓		✓✓	
Refinitiv	✓✓✓			✓✓	
S&P Global	✓✓		✓✓✓	✓	
Sustainalytics	✓	✓✓✓		✓✓	

Calculation Methodologies are Black Box by Design

Organizations that generate ESG ratings typically communicate their calculation methodologies, but always with insufficient technical detail for a third party to recreate their results. Ostensibly, this is done to protect their intellectual property and continue to sell their product. For example, Moody’s methodology is 69 pages long, with little discussion of its quantitative model. Arabesque relies on artificial intelligence (AI) algorithms that are notoriously complex; even the programmers find it difficult to fully understand the calculations made by the AI engine. While CDP relies solely on its survey for data acquisition, algorithms or software employed to collate and generate reports are not discussed. Note that NCASI has developed an in-depth guide for scenario analysis required by CDP.

Typical ESG Methodology



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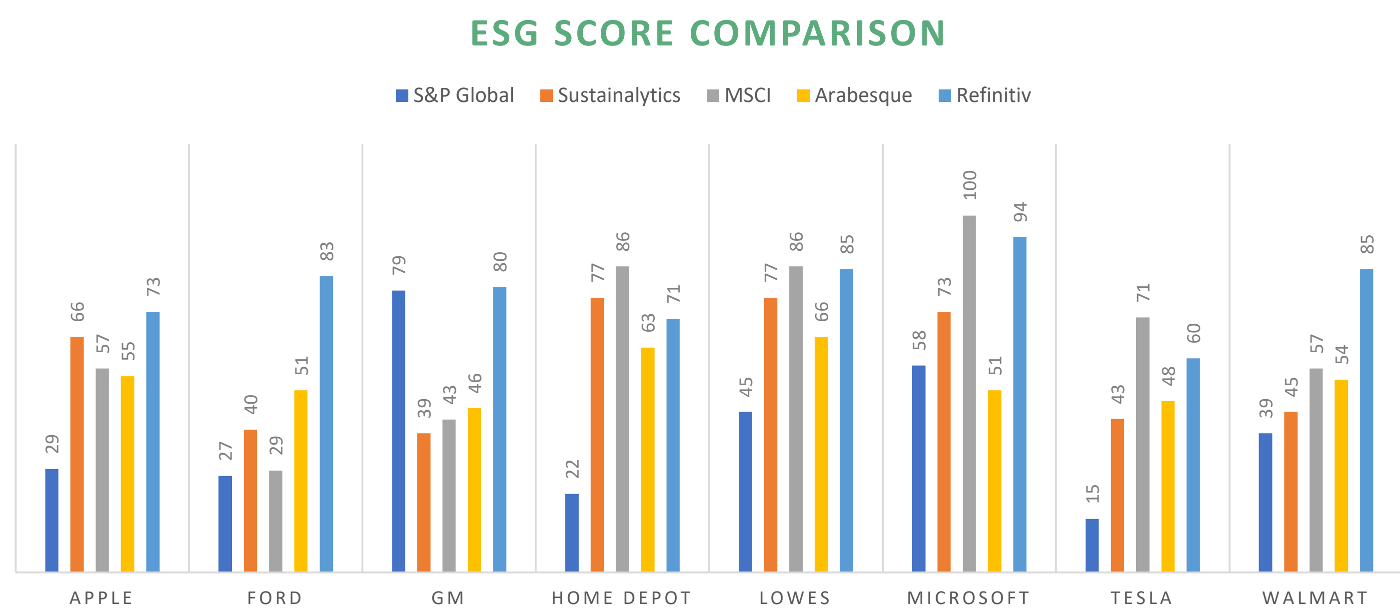
The proliferation of ESG rating organizations has reduced the influence of any single rating system and added complexity to the ESG landscape. With each organization using its own unique and black box methodology, there is a range of results for any given company. In an ideal world, there would be a single score, rank, or rating for a company. However, rating organizations increase their own value by creating methodology niches, attempting to provide the 'most accurate' ESG score, and presenting their results in unique and un-replicable ways. For example, Sustainalytics scores are highly non-linear and are typically under 50, but can be as high as 70, while MSCI gives letter ratings. NCASI has examined ESG results for a select number of companies and has normalized a subset of these results for comparability, with 0 being the lowest ESG rating and 100 the highest possible. The chart below shows the range of ESG scores to illustrate their disparity.



The chart above shows that when normalized for comparison, scores vary widely within a company by rating organization. It also shows that scores are inconsistent within a given rating organization when comparing results across companies and industrial sectors. For example, S&P Global gives Ford a score of 27 and GM a score of 79, while Sustainalytics gives them virtually the same score.

ESG Comparison with Peers

Some rating organizations, such as MSCI and Sustainalytics, rank companies within a peer group. Such comparisons should, in theory, better normalize ESG ratings within the peer group; however, the inconsistencies—in methodologies across agencies, in application of these methodologies to different industrial sectors, and in peer group composition—risk making these comparisons unreliable.

Ratings Comparison Example - Walmart

Sustainalytics' risk score, on the left, compared to MSCI's on the right. Both with different peer group compositions.