

ESG: A PRIMER

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Introduction

In recent years, there has been increasing emphasis on companies' and related entities' environment, social, and governance practices. The basic premise is that investors should evaluate firms based not just on their commercial performance but also on these attributes, hopefully through a system of tractable metrics.

Dubbed "ESG," momentum has been increasing as asset managers and capital providers are increasingly stressing these factors in their investment decisions. Relatedly, public-facing and capital-intensive practitioners, including but not limited to oil, natural gas, and coal concerns, are engaged in some combination of modifying their behaviors and accelerating reporting on their ESG worthiness.

A review of historical developments and a summary of key policy considerations.

While ESG is already causing strong shifts in capital allocations, branding, and credit-claiming, the movement seeks to aggregate a variety of objectives that lack coherent, uniform, and codified analytical and regulatory frameworks.

Furthermore, this lack of uniformity presents significant obstacles to the effectiveness of ESG criteria since currently it is difficult to precisely negotiate between ESG concerns and traditional financial metrics, and the various proposed systems can easily be gamed. Nevertheless, jurisdictions are adopting heterogeneous policies that vary both in terms of ambition and approach. With respect to the "E" (environment) some price carbon dioxide emissions, some subsidize green energy, some do both, but also, many do neither and instead choose other options.

ESG, Net Zero, and Stranded Assets: Origins and

Intent

ESG

ESG's origins can be traced to a few key predicates. By the mid-1990s, niche investment companies and other groups were offering "socially responsible investment (SRI)" management. One example of SRI priorities was the exclusion of weapons manufacturers from investment vehicles. But in terms of a percentage of AUM (assets under management), these SRIs were tiny.

In the early 2000s, staffers at the United Nations [Environment Programme Finance Initiative \(UNEP FI or The Finance Initiative\)](#) wanted to have the investment

goals of large institutional money managers aligned with its own mission. Specifically, UNEP FI sought ways to show that investments that positively affected biodiversity, human rights abuses, and GHG emissions were beneficial to investors' total returns. Critically, it was also important not to ignore companies' supply chains, labor policies, and environmental practices.

Seeking ways to gain traction, UNEP FI sought ways to demonstrate that considering these factors in investing decisions did not violate financial institutions' fiduciary responsibility. To that end, it commissioned two research works from (1) financial and (2) legal practitioners.

In a definitive report commissioned by UNEP FI involving twelve large asset management organizations, (including BNP Paribas and ABN AMRO), industry sector analysts held "... that long-term shareholder value rests upon rigorous integration of environmental, social and corporate governance issues in the valuation process." (Some consider that this was the first use of the three words associated with ESG in a UN publication). The report was published in 2004, titled "[The Materiality of Social, Environmental, and Corporate Governance Issues to Equity Pricing](#)."

Furthermore, UNEP FI asked renowned multinational law firm Freshfields Bruckhaus Deringer (FBD) to consider the legal ramifications of utilizing ESG criteria in light of "the modern prudent investor rule." While acknowledging the primary wealth maximization responsibility of investment managers, FBD determined that investment decision-making has latitude to use a wide-range of investment strategies, concluding, "a decision-maker may integrate ESG considerations into an investment decision to give effect to the views of the beneficiaries in relation to matters beyond financial return." FBD's report was published in 2005 with the title "[A Legal Framework for the Integration of Environmental, Social and Governance Issues into Institutional Investment](#)."

Net Zero

Explicit first use of the term "net zero" is difficult to date. However, beginning with the [October 2014 IPCC \(Intergovernmental Panel on Climate Change\) Fifth Assessment Report](#), language such as this was used: "... net anthropogenic additions of CO₂ into the atmosphere *have to reach zero*...." In December 2015, Article 4.1 of the Paris Accords stipulated that "... Parties aim to reach global peaking of greenhouse gas emissions as soon as possible ... so as to achieve *a balance between anthropogenic emissions and removals*...." Building on these precedents

of the mid-2010s, several countries, including Sweden and Germany, passed legislation adopting the language of these agreements.

But it is with IEA’s May 2021 special report “[Net Zero by 2050](#)” where the term “net zero” combined with the mechanics of achieving it are explicitly delineated. Specifically with respect to hydrocarbon investment, the report says: “Beyond projects already committed as of 2021, there are no new oil and gas fields approved for development in our pathway [to net zero]”

Where the “E” (“environmental”) of ESG originally referenced a broad array of environmental factors, recently “E” has come to stand almost solely for “E”missions. This shift has had the effect of making the “E” portion of ESG investing to be synonymous with the IEA’s Net Zero proposed pathway of a rapid decreasing use of hydrocarbon fuels, and the increasing commissioning of weather-dependent renewable electricity production.

Grounded in these legitimizations, political movements that seek to mitigate, or even eliminate, GHG (greenhouse gas) emissions from hydrocarbon fuel combustion have found a powerful vessel in ESG and have made net zero integral to current ESG promulgation.

Stranded Assets

Concurrent with the decade-long formulation of “net zero,” the increasingly discussed notion of “stranded assets” has been gaining different meanings. “Stranded assets,” as most practitioners use the term, refers to a set of natural resources that have no access to consuming markets. A coal field without a mining operation and railroad, or an oil reservoir without a drilling rig and pipeline cannot properly provide their resources to market to be utilized, and so the large investments in extraction of these resources would be stranded.

With any major innovation there is the possibility of rendering an existing set of technologies and systems obsolete in a short period of time. Gasoline- and diesel-powered motor vehicles gained acceptance rapidly at the beginning of the twentieth century as their utility was quickly proven. Within a few short decades, industries such as wagon-building, plow-making, and others that relied on draft horses, as well as their breeding, were diminished considerably.

Similarly, some anticipate that innovations in the development of non-GHG emitting energy resources can potentially quickly replace and hence rapidly devalue existing oil and natural gas infrastructure, from production fields to processing facilities to final points of distribution. In this way these assets would become “stranded.” Furthermore, given the existing large-scale investment in the form of public equity and fixed-income holdings, this

devaluation would lead to massive financial losses thereby causing considerable loss of wealth. Constituencies, especially academic ones, are cautioning on the potential with large negative macroeconomic impacts from this novel understanding of “stranded assets.”

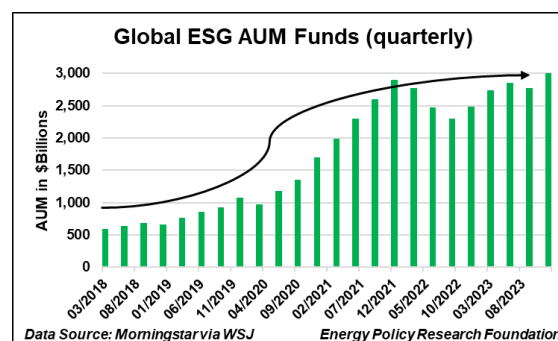
Estimates of ESG Assets under Management (AUM)

Concurrent with the two definitive commissioned reports published in the 2000s, UNEP FI staffers pursued the world’s largest pension managers to draft and agree to “principles for responsible investment (PRI)” seeking their support for ESG investing. Launched in 2006, the PRI almost immediately acquired 63 signatories including the California Public Employees’ Retirement System and the Government Employees Pension Fund of South Africa, and others, combined representing over \$6.5 trillion in assets. By June 2019, there were 2,450 signatories with \$80 trillion AUM.

Globally, current estimates of the total AUM in stock and fixed-income mutual and exchange-traded funds range between \$100 and \$120 trillion. While the \$80 trillion representing the AUM of the June 2019 PRI signatories is formidable, actual ESG-themed AUM is considerably smaller having grown rapidly through September 2021 and range-bound since.

There are many different estimates of ESG AUM. While they indicate similar trends, AUM for particular periods varies from one reporting entity to the other; this is probably due to the range of different competing metrics. Nevertheless, [Morningstar](#), an established investment research firm that is focused on evaluating asset management, estimates that as of December 2023 globally there was over \$3.0 trillion in specific ESG funds. This is up from \$600 billion in March 2018, implying annualized growth of almost 31% (*Figure 1*).

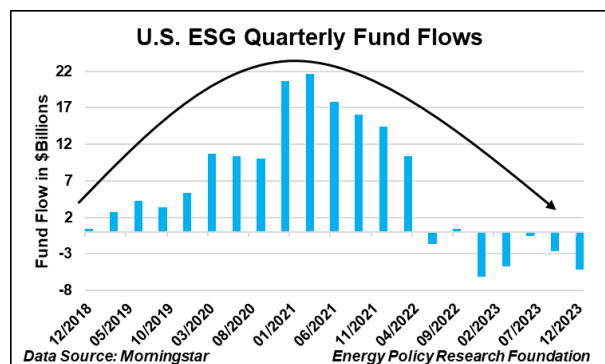
Figure 1



Of total AUM, Morningstar estimates that about 80% is in Europe, 11% is in the U.S., and the balance is in other jurisdictions.

A significant part of the variability of the size of AUM is attributable to inflows of new money. However, in the U.S., new commitments peaked in 2021 and then dropped off quickly in 2022 as investors subsequently began withdrawing funds (*Figure 2*). A combination of higher

Figure 2



interest rates and lower returns that have caused investors to liquidate \$13 billion over the course of 2023.

There are two other sources of change in AUM. The European Union’s [Sustainable Finance Disclosure Regulation \(SFDR\)](#) came into force in December 2019. In order to be in compliance, many established non-AUM funds recalibrated their investment strategies, thereby earning ESG status.

Secondly, during 2022 all financial markets retreated from their late 2021 highs; ESG funds were no exception.

Governmental Institutions Promulgating Regulations and Standardizations

United States

Corporations and investment managers are required to report data on their financial behavior. In the U.S., primary national authority is given by Congress to the [SEC \(Securities and Exchange Commission\)](#). Secondary national authorities are the [CFTC \(Commodity Futures Trading Commission\)](#) and the [Office of the Comptroller of the Currency](#).

In turn with the evolution of financial asset management and investment, the SEC needs to have current and potential regulations researched and codified. This is done by [FASB \(the Financial Accounting Standards Board\)](#), a private not-for-profit firm that is essentially given monopolistic authority to perform this function.

In March 2021 the SEC announced the establishment of the “[Climate and ESG Task Force](#)” in its Division of Enforcement. The Task Force’s mandate is to develop initiatives to identify ESG-related misconduct. More importantly, the Task Force’s initial focus has been “to identify any material gaps or misstatements in issuers’ disclosure of climate risks under existing rules.”

Essentially, this is a restatement of the SEC’s purpose: address disclosure gaps that threaten investors and markets.

[On March 21, 2022, the SEC proposed “Enhancement and Standardization of Climate-Related Disclosures for Investors.”](#) The general goal of the rules is to enhance and standardize climate-related information by public corporations (“SEC registrants”). Among other things, these rules mandate significant line-item disclosures, detailed information on emissions, and requirements to report GHG targets. The rationale is for SEC registrants to state the material impact of climate-related risks on business strategy, operations, and financial position.

The most controversial part of the proposed SEC ESG rules has been referred to as the “Scopes.” The SEC’s proposal would require companies to publish their related GHG emissions in three categories. Specifically, Scope 1 emissions are a company’s direct emissions from the goods and services that it provides. Scope 2 emissions are emissions from the generation of purchased energy, mostly electricity. Scope 3 emissions would require companies to disclose emissions from its supply chain, both from companies upstream (those that provide services and goods to the company), and those downstream (those that purchase goods and services from the company).

Over 24 thousand comments were submitted by the June 17, 2022 deadline. [The final rules were published on March 6, 2024.](#) Critically, they did not include Scope 3 requirements. However, the reporting threshold for climate-risk materiality is more than one percent of income before taxes requiring the SEC registrant to provide a detailed analysis of the contributing factor. This is seen as particularly stringent by some critics.

[Compliance will be phased-in depending on an SEC registrant's type; the earliest submissions are required in fiscal years beginning in 2025 and the last in 2033.](#)

Presentation of the rules' disclosures is required in several key SEC reports, notably 10-K, 10-Q, and 20-F. Discussion of Scope 1 and Scope 2 emissions will need to be verified by independent entities (“attestation”) such as auditors and consultants.

Within ten days, a stay was issued in response to one of many lawsuits by the Fifth U.S. Circuit Court of Appeals in New Orleans. Through a lottery system on Multidistrict Litigation, the Eighth U.S. Circuit Court has been given authority over the determination in which of the Circuit Courts the case would preside. The stay will probably be in effect until a court is selected. The likelihood of any sort of resolution is doubtful before January 1, 2025, the first year for reporting requirements.

European Union (EU)

The European Union has enacted three critical directives. The first was [Directive 2014/95/EU - Non-Financial Reporting Directive \(NFRD\)](#). It requires large EU public-interest companies with more than five hundred employees to disclose environmental and social information in their annual reports beginning in 2018. The NFRD applies to approximately 6,000 entities and recommends a choice from several specific standards including the Global Reporting Initiative (GRI), OECD guidelines, or ISO 26000.

The second is the [Sustainable Finance Disclosure Regulation \(SFDR\)](#). It came into force in December 2019. SFDR seeks to impose mandatory disclosure obligations relating to adverse ESG risks on asset managers and other financial markets participants. First SFDR reporting obligations were due in March 2021; from that point, there will be expanding scope and participation at key intervals through June 2023. A significant portion of the SFDR applies to all financial managers whether or not they have an ESG/sustainability focus or not.

The third is the [Corporate Sustainability Directive \(CSRD\)](#). It was formally adopted by the European Parliament and EU Council in November 2022. It became law on January 5, 2023. CSRD expands NFRD reporting obligations to 50,000 entities from NFR’s 6,000. Reporting standards are the EU’s own, based on the ISSB’s. Compliance will be applied progressively beginning in 2024 and continuing through 2028.

Non-Governmental Institutional Initiatives

- Davos 2020 World Economic Forum (WEF), WEF International Business Council (WEF IBC), and the Big Four Accounting Firms

Held during the end of January 2020, the [2020 WEF meeting of the annual Davos, Switzerland](#) event placed the development of ESG frameworks at the core of its discussions. This event significantly elevated ESG-related discussions. During the event, WEC’s IBC, led by Bank of America CEO Brian Moynihan, launched a proposed framework of twenty-two core quantitative sustainable metrics for companies to use in their ESG-related reporting broken into four subsets: governance, planet, people, and prosperity.

Each subset of these metrics would be standardized by one of the Big Four Accounting Firms: “governance” led by Deloitte; “planet” led by PricewaterhouseCoopers; “people” led by KPMG; and “prosperity” led by Ernst & Young. The IBC gave itself an aggressive schedule to complete its work by the fall of 2020. On September 22, 2020, the WEF released its report, [“Measuring Stakeholder Capitalism: Towards Common Metrics and Consistent Reporting of Sustainable Value Creation.”](#) By January 2023, the WEF announced that 130 companies were using

the metrics, including Colombia’s EcoPetrol, Saudi Arabia’s SABIC petrochemical firm, and France’s digital automation and energy management concern Schneider Electric.

- ESG Reporting Frameworks and Ratings Agencies

Before the announcement of explicit ESG compliance reporting requirements, regulators, auditors, and consultants have encouraged corporate and investment decision makers to aggressively collect ESG-related data. Despite the lack of singular, codified, and uniform ESG standards, there are several organizations effectively competing to systematize ESG data collection and reporting standards. They are of two types: general frameworks and specific initiatives led by rating agencies.

There are several ESG Reporting Frameworks. However, the two key initiatives – [GRI](#) and [SASB](#) are compared in Table 1.

Table 1

Key ESG Reporting Frameworks		
	Founded	Details
Global Reporting Initiative (GRI)	1997	GRI was founded by advocacy group CERES (Coalition for Environmentally Responsible Economies). GRI seeks to show companies' stakeholders how their organizations align with CERES principles for responsible environmental conduct. CERES Principles are a ten-point code of corporate environmental ideals; corporations that use GRI's reporting standards are requested to publicly endorsed the Principles in their mission statements. GRI's standards are used by over 1,000 organizations
Sustainability Accounting Standards Board (SASB)	2011	SASB set out to develop standards that take into account both ESG and financial fundamentals. In 2021, SASB and the International Integrated Reporting Council combined to form the VRF (Value Reporting Foundation). Further consolidation through merger or acquisition has taken place by VRF with the current organization now known as ISSB (International Sustainability Standards Board).

Energy Policy Research Foundation

ESG rating agencies are intended to provide information about the relationship between a particular corporation and non-investor stakeholder interests. Much like traditional bond-rating counterparts, ESG rating agencies express their ratings in the form of a grade or a score. In making their assessments, they use and weigh a variety of resources and methodologies. These include public disclosures, surveys, interviews, and even artificial intelligence.

As with other ESG matters, there is a major lack of uniformity in ratings assessments that raises concerns over their reliability. In particular, there are two competing views on what these ratings should motivate: one side promotes the ESG view that a company impacts the welfare of its stakeholders such as local communities and employees. Using this definition, a company can improve its ESG profile by withdrawing from activities that are harmful to stakeholders or improving business practices

that are beneficial to them. The costs of these actions are born by shareholders.

The other view is that ESG metrics assess factors that are financially material. With this view, even if ESG-related action is costly in the short term, it should prove financially worthwhile to shareholders in the longer term. The recent discussion around stranded assets is critical to this view's calculus.

There are large numbers of ESG rating agencies; the ones having widest reception are in Table 2.

Table 2

Key ESG Rating Agencies		
	Founded	Details
MSCI	Spun off from Morgan Stanley in 2007	MSCI publishes ESG ratings on 8,500 companies. Through a series of acquisitions MSCI has purchased companies that track sustainability data, governance and accounting quality ratings, and climate-change analytics.
Sustainalytics	1992	Sustainalytics publishes ESG ratings on over 13,000 companies. Sustainalytics was acquired by Morningstar in 2020 whose primary business is the rating of mutual and exchange-traded funds. Using a globe icon, Sustainalytics awards five globes to firms showing the lowest ESG risk.
ISS ESG	1993	ISS ESG publishes ratings on 11,800 issuers and 25,000 funds. It is a subsidiary of Institutional Shareholder Services (ISS), the largest proxy advisory firm. In 2020, Deutsche Börse acquired an 80% stake in ISS.
<i>Energy Policy Research Foundation</i>		

- Multinational Financial Initiatives: The case of GFANZ

The [Glasgow Financial Alliance for Net Zero \(GFANZ\)](#) was formed in April 2021 during COP26 (The 2021 United Nations Climate Change Conference). GFANZ's stated purpose is to be "a global coalition of leading financial institutions committed to accelerating the decarbonization of the economy."

GFANZ is further organized into seven sectoral subdivisions each with their own initialism: banking ([NZBA](#)), insurance ([NZIA](#)), asset owners ([NZAOA](#)), asset managers ([NZAM](#)), financial service providers ([FSPA](#)), investment consultants ([NZICI](#)), and [Paris \[Accord\] asset owners \(PAAO\)](#).

At formation, there were 550 members from 50 countries with approximately \$550 trillion AUM. GFANZ and its sectoral alliances make no detailed requirements. One

initial key requirement, to join the U.N.'s "Race to Zero Campaign," has been dropped. More recently, there have been some notable defections from these alliances, notably the NZIA, which started with 30 members of which 10 members have left, including Lloyd's of London, Allianz, AXA, and Japan's SOMPO. The most notable withdrawal from NZAM has been Vanguard, the second largest by AUM global manager.

While most of those who have quit the GFANZ alliances have declined to comment, the general view has been that there was considerable political pressure for them to do so. Vanguard indicated that it withdrew "... to make clear that Vanguard speaks independently on matters of importance to our investors."

Policy considerations

As implied in the previous discussion, ESG presents policymakers with a myriad of issues, these include but are not limited to:

- crafting unified systems of enforceable reporting metrics from multiple competing proponents;
- dealing with fraud, sometimes termed "greenwashing," in the instance when a company claims environmental credentials for the sake of marketing but actually is not making any notable efforts;
- monitoring negative spillovers when heterogeneous and divergent ESG policies of varying ambition and approach each in different districts and countries lead to loss of economic investment and activity in costly districts in favor of jurisdictions with lenient policies;
- limiting capital to particular economic sectors thereby restricting investment diversification choices that could increase risk and undermine return;
- discouraging long-standing policies especially those that support the reliability and resilience of energy supplies;
- monitoring proxy voting to protect investors' financial interest.

Further Reading

Related to Net Zero, please see The Energy Policy Research Foundation's "[A Critical Assessment of the IEA's Net Zero Scenario, ESG, and the Cessation of Investment in New Oil and Gas Fields.](#)"

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