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Sustainable Investing Research Initiative

SUMMARY

Columbia University Sustainable Finance Seminar

SFS13:
Buried Treasure: How Experts Uncover Financial Value and Hidden Risks in Sustainability Data

May 6, 2026

OVERVIEW

The seminar explored the concept of "connectivity," which involves interpreting a company's financial statements and sustainability reports together as a unified narrative of its overall performance and long-term value creation. The central argument was that the financial statements and the sustainability report each capture only part of a company's reality, and that the analytically interesting information often lies in the relationship between them.

The presenters approached this from two points: a reporting and assurance perspective grounded in efforts to build a global sustainability disclosure baseline aimed at investors, and an investor's perspective focused on translating disclosure into valuation. A recurring theme was the deliberately investor-oriented, financially material scope of the emerging global standard, and the corresponding limits of what disclosure alone can achieve. While better connectivity and disaggregated data promise sharper analysis, participants stressed that disclosure should ultimately be paired with government action, enforcement, and clearer reporting boundaries.

Connectivity and the Case for a Global Disclosure Baseline

The first presentation, offered from a reporting and assurance standpoint, defined connectivity as the effort to tell one coherent story about a company rather than two disconnected ones. The speaker observed that more companies now publish sustainability reports, whether by requirement, perceived obligation, or competitive advantage, yet these often sit apart from the financial statements. Because the financial statements are largely historical (position, performance, and cash flows) while sustainability disclosure is more forward-looking (the risks and opportunities that may shape a company's future), reading them together is essential to uncover hidden financial value and risk.

The speaker situated this within the broader reporting landscape, distinguishing among the major sustainability frameworks and expressing strong support for a global, investor-focused baseline built on financial materiality. This approach was contrasted with the European model, which adopts a double-materiality lens that also serves non-investor stakeholders, and with widely used frameworks oriented toward broader audiences. The case for a single global baseline rested on the benefits that comparability has already delivered in financial accounting: comparability across companies and over time, consistency of method, and lower preparation costs. The speaker emphasized that, for this purpose, disclosure should be confined to information reasonably expected to affect an investor's decisions, warning against information overload.

Connectivity, in this view, depends on information that is comparable, consistent, timely, verifiable, and neutral. It also requires information to be presented as a fair and complete picture. According to the speaker, these qualities make information holistic and coherent. The emphasis fell on genuine storytelling about a company's assets, risks, and opportunities. Practically, connectivity is achieved through consistency of narrative and assumptions and through cross-referencing between documents. For example, a climate event described in the sustainability report can be tied to its effect in the profit-and-loss account, and sustainability-related revenues can be reconciled to reported revenue. The speaker noted that inconsistencies remain surprisingly common, often because sustainability and financial reports are prepared by different teams, and pointed to growing integration of these functions as a sign of maturation.

An Investor's Lens: Connecting Reports to Valuation

The second presentation, delivered from the perspective of a long-tenured equity analyst, framed connectivity as something investors have always practiced. The investor's objective was described

simply as finding mispricing. From this standpoint, material information is the information that most affects valuation, a definition that extends beyond formal corporate reporting. Audited financial statements remain the foundation of any model, but not the entire structure. Using a medical analogy, the speaker compared financial statements to an X-ray that reveals a company's financial "bones," while sustainability disclosures resemble an MRI that captures the surrounding soft tissue in greater detail.

The presenter addressed an expectations gap among users who assume that climate-related risks should automatically appear in financial statements. Often, they do not for legitimate reasons. For example, an asset with a short remaining useful life may not require a write-down for a risk expected to materialize much later, even if the business's long-term value is affected. A company's statement that it had assessed climate risk and found no current impairment was described as useful information. Where impairments do occur, such as goodwill associated with an acquired operation whose expected life has shortened, the challenge is determining how much is attributable to climate risk, since the relationship between a risk and cash flow is rarely one-to-one. The analyst compared the exercise to a "spot the difference" game across the two reports, emphasizing the need to identify risks that appear in only one document while avoiding double-counting.

The presenter used industry examples to illustrate effective disclosure practices. One company provided a table showing the expected annual financial impact of specific climate risks over time, which was described as highly valuable for financial modeling. Another identified the individual responsible for managing each risk, making it easier for investors and analysts to engage with management. The speaker also discussed a major environmental claim that received only brief mention in the financial statements but was explained in much greater detail in the sustainability report. By combining information from both documents, analysts were better able to estimate the likely financial outcome. On the opportunity side, the transition of automobile manufacturers to electric vehicles highlighted the challenge of valuing a declining business separately from a growing one. This task is complicated by limited segment-level reporting and a lack of information about workforce retraining.

The presentation concluded with three recommendations. Companies should provide more detailed business disaggregation, disclose more operational metrics that connect physical inputs to financial costs, and clearly distinguish between financial and sustainability reporting. These recommendations reinforced the speaker's advice to "treat the patient, not the X-ray."

The Scope and Purpose of the Global Standard

The discussion repeatedly returned to the investor-focused nature of the emerging global baseline. Participants noted that the standard is designed to show how sustainability issues affect a company's financial position and value. It is not intended to assess whether a company has a positive or negative impact on society or the environment. One participant argued that connectivity is primarily an investor concern because investors are interested in the financial effects of sustainability issues. Other stakeholders are often more concerned with how a company's actions affect them directly, regardless of whether those impacts have financial consequences for the company.

Some participants questioned the assumption that all investors have the same objective of maximizing financial returns. They pointed out that investors also consider extensive goals, such as the well-being of beneficiaries and society. Several participants suggested that confining the standard to financial materiality lowered the bar for adoption but left a significant body of decision-relevant information outside its remit.

Materiality, Boundaries, and the Limits of Definition

Another discussion focused on the challenge of defining what information is material and who it is material for. One experienced participant argued that assigning specific reports to specific audiences does not reflect how information is actually used. Investors and other stakeholders draw on a wide range of sources and determine for themselves what information is important. As a result, defining materiality too narrowly can reduce the usefulness of a reporting standard. Participants mentioned that different groups have legitimate information needs and use disclosures for different purposes. At the same time, the distinction between financial materiality and impact materiality remains important and may never be fully resolved. The practical takeaway was that this diversity of perspectives should be accepted. Rather than debating strict definitions, participants stressed the importance of cooperation among different reporting and stakeholder groups.

New Data Sources and the Mapping Problem

Participants discussed the growing use of alternative data sources, including satellite and sensor imagery, credit-card and search data, and machine-learning tools. These technologies are increasingly able to identify emissions, pollution, and other risks at specific facilities and companies. However, several speakers cautioned that such data remain incomplete and are often difficult to connect to the reporting boundaries of a company. The recurring point was that

audited financial information still serves as the anchor against which other signals are calibrated. Even when analysts use other data sources, financial statements provide the most reliable and verified information available. Participants also noted the challenge of linking large amounts of external data to a specific company. This mapping process remains complex and difficult, and while artificial intelligence may help, it is unlikely to remove the challenge entirely.

AI and the Plunging Cost of Compliance

Participants also noted that assumptions about the burden of reporting are rapidly shifting. Resistance to frameworks such as Europe's CSRD was historically built on arguments regarding the “burdensome expense” of compliance. However, it was pointed out that artificial intelligence is already driving down the cost of developing these interoperable reports by 50% to 80%. As technology makes detailed reporting exponentially cheaper, the argument that mandatory disclosure places an undue financial burden on competitiveness is becoming less valid.

Disaggregation, Human Capital, and Supply-Chain Visibility

Participants emphasized the need for more detailed and disaggregated reporting. They argued that aggregate figures often hide important differences that investors and other stakeholders need to understand. Examples include the performance of a company’s weakest facilities and country-level information on employment, assets, employee turnover, and exposure to risks such as forced labor. Human capital and biodiversity were identified as two of the most important sustainability topics after climate change, yet participants felt that current reporting provides limited information on both. They also highlighted the difficulty of gaining visibility into supply chains. Some companies do not know their customers’ customers or their suppliers’ suppliers, and some lack basic information about how their products are ultimately used. Several participants pointed to country-by-country tax reporting as a useful example of structured and comparable disclosure. They suggested that similar forms of detailed reporting could meet the needs of a wide range of users.

Whether Disclosure Changes Behavior

An unresolved question was whether improved disclosure actually changes corporate behavior or redirects capital. Participants noted that even widespread, mandatory reporting across jurisdictions does not necessarily lead to shifts in investment patterns or company practices. Disclosure standards were therefore described as tools for reporting, not instruments for governing behavior. Participants suggested that standard-setters should focus on organizing and presenting information as clearly and accurately as possible. Decisions about what outcomes are acceptable were seen as the responsibility of governments, regulators, and other institutions. One participant compared disclosure to mandatory ingredient labeling. In this view, disclosure on

its own rarely changes behavior. Instead, it creates the infrastructure that allows others to identify risks and respond, often through later policy actions such as taxation.

Enforcement, Externalities, and the Collective-Action Problem

The discussion focused on a central challenge of accountability for impacts that lie outside a company's direct financial interest. One participant described this as the "elephant in the room." Investor-focused reporting was seen as largely self-reinforcing, supported by financial incentives. In contrast, impact reporting deals with externalities that corporations are not structured to internalize. The group debated the role of fiduciary duty in bridging this gap. One view held that large investors, bound by a duty of care and impartiality, are legally obligated not to sacrifice future generations' opportunities for current gains. This creates a tension between an investor's long-term duties and a corporation's short-term incentives. However, others countered that pension funds are not a substitute for public policy, noting they still retain an economic incentive to maximize returns, even through high-impact investments like oil and gas.

PART III – CONCLUSION AND ACTION-ORIENTED PRIORITIES

Strengthening Connectivity in Practice

Companies and their advisers may want to treat connectivity as a core reporting objective. Narrative explanations, assumptions, and data should be consistent across the financial statements and the sustainability report. They should also be linked through clear cross-referencing and reconciliation. Closer integration between the teams preparing these documents would help reduce inconsistencies and support a more coherent, investor-ready view of the company.

Improving Disaggregation and Operational Metrics

Standard-setters and preparers could also improve disaggregation and operational reporting. More detailed disclosure at the segment and country level, including information on people, assets, and risks, would help users identify the specific parts of a business that drive value and risk. Over time, combining financial results with operational data, such as energy use and its related costs, would improve analysts' ability to model transitions and assess businesses with different growth paths.

Clarifying the Reporting Boundary

Clearer boundaries between financial and sustainability reporting could also help address confusion about when sustainability risks should appear in financial statements. More explicit guidance on what belongs in each report, and how sustainability risks translate into recognition, measurement, or disclosure in the accounts, would reduce uncertainty and improve the reliability of linked analysis.

Sequencing the Expansion of Standards

Given constraints on both standard-setters and preparers, expansion beyond climate could proceed in a realistic sequence that prioritizes quality, with human capital and biodiversity identified as leading candidates. Participants stressed the importance of allowing time to embed strategy and develop reliable data, instead of introducing complex requirements at once. Over time, improvements in technology are expected to make broader and more detailed disclosure more practical.

Pairing Disclosure with Policy and Enforcement

Participants also emphasized that disclosure alone is unlikely to shift capital allocation or reduce externalities. They pointed to the need for complementary government action and enforcement. Coordinated public policy, ideally aligned internationally as accounting and disclosure standards are, was seen as essential to resolving the collective-action problem, ensuring that improved reporting becomes an effective input for regulators and policymakers.

Horizon of Relevance

Finally, participants suggested that the definition of materiality will continue to expand, as it has in the past. They highlighted emerging areas of concern such as geopolitical and political risk, as well as the resilience of democratic institutions. These system-level factors may increasingly be considered relevant to companies and investors, reflecting a broader and evolving understanding of risk.

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