KNOWLEDGE AND POWER IN MEASURING THE SUSTAINABLE CORPORATION: STOCK EXCHANGES AS REGULATORS OF ESG FACTORS DISCLOSURE

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ABSTRACT

“Sustainability” surely figures amongst the most discussed themes by corporate lawyers and policymakers at the global level in the last years. In particular, much attention has been devoted to the performance of firms managed in a “sustainable” way and on how to design an ESG (environmental, social, governance) factors disclosure framework that provides meaningful information to investors. At the same time, policymakers around the world believe that non-financial factors disclosure would foster a reallocation of capital to “sustainable” firms, contributing to the solution of some of the most pressing issues of our time. However, what should be measured and how to measure it is not a merely technical issue but depends on political choices: the concept of sustainability should be declined as plural. In order to assess which concept of sustainability is embedded into indicators it is necessary to understand the institutional structures and dynamics of the single reporting frameworks, and which issues they purport to disclose. This

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paper tackles these issues providing the first academic analysis of the ESG factors disclosure framework elaborated by the Sustainable Stock Exchanges Initiative – a project developed since 2009 under the aegis of the United Nations – and the World Federation of Exchanges – the stock exchanges and clearing houses trade association.

In order to understand how and why the analyzed disclosure framework was produced, the paper develops an original conceptual framework that takes into account the nature of indicators as technologies of global governance, the “four actors” model advanced by Büthe and the role of transnational financial associations in the production of global governance rules. Using this theoretical framework, three distinct contributions are made. First, the paper provides a historical and political analysis of this new framework that is able to explain its adoption and implementation, disentangling ESG factors disclosure from corporate social responsibility and socially responsible investment. Second, it analyzes how the articulated structure of the actors involved in the production of the framework determined its content and the underlying concept of sustainability. Finally, it analyses why the structure of the actors involved and the specific conception of ESG factors disclosure hinder full and accurate information disclosure and narrow down the concept of sustainability embedded into the indicators. While the analysis is specific to the Sustainable Stock Exchange Initiative and the World Federation of Exchanges indicators, the theoretical model can be deployed to approach other sustainability frameworks as well.
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I. INTRODUCTION
“Sustainability” surely figures amongst the most discussed themes by corporate lawyers and policymakers at the global level in the last years. As elusive as the concept can be, the sense of urgency surrounding climate change and environmental considerations is clearly the main driver behind this trend. The burgeoning levels of inequality that have contributed to the crisis of representative democracy, not only in the global north, come second. The intention of pulling off from the Paris Agreement by major countries has only intensified the debate around the topic and has offered global investors and corporations an occasion to take a leadership role as main actors in the struggle against climate change.

After the Great Financial Crisis, 1 corporate social responsibility and sustainable investing have become mainstream through the reframing of unsustainable practices as business risks. 2 Therefore, the necessity to provide investors 3 with reliable data and metrics to evaluate these risks 4 has spurred a call for harmonization and standardization in ESG issues reporting focused on financially material factors. 5 In fact, it is widely assessed that the existing voluntary reporting schemes fail in providing investors with decision-useful information. 6 Corporate social responsibility and socially responsible investment have been rebranded as

1 In its launch-discourse for the SSEI, the then UN Secretary-General Ban Ki-Moon himself connected the financial crisis and environmental issues with the necessity for businesses to care about ESG factors. See Ban Ki-Moon, UN Secretary-General on Sustainable Stock Exchanges, https://www.youtube.com/watch?v=ulRtDpLpKJ. Moreover, the renewed attention to environmental issues and rising inequality have increased potential business risks for firms.

2 BlackRock, Viewpoint, Exploring ESG: A Practitioners Perspective (June 2016), http://www.blackrock.com/corporate/en-fi/literature/whitepaper/viewpoint-exploring-esg-a-practitioners-perspective-june-2016.pdf (stating that “Environmental, social, and governance issues are integral to our investment stewardship activities, as the majority of our clients are saving for long-term goals. It is over the long-term that ESG factors – ranging from climate change to diversity to board effectiveness – have real and quantifiable financial impacts. Our risk analysis extends across all sectors and geographies, helping us identify companies lagging behind peers on ESG issues”).

3 Whilst the socially responsible investor and impact investor community has grown exponentially in the last decade, the provision of reliable ESG information is now requested even by the generalist investors that do not target any specific non-financial impact, Daniel C. Esty & Quentin Karpilow, Harnessing Investor Interest in Sustainability: The Next Frontier in Environmental Information Regulation, 36 YALE L.J 628-629 (2019).

4 Cynthia A. Williams & Jill E. Fish, SEC Rulmaking Petition 9-12 (2018), https://www.sec.gov/rules/petitions/2018/petn4-730.pdf (arguing that in the US, corporations struggle to provide decision useful information and company’s voluntary disclosure is insufficient to meet investors’ needs).


ESG factors considerations and have changed in their substance. The “doing good while doing well” approach has been partially substituted by business risk considerations and investment opportunities linked to ESG issues. Exchanges, investors and financial regulators have called for ESG factors disclosure, rather than NGOs, workers or consumers.

The call for elaborating ESG metrics disclosure has been taken up also by a project developed since 2009 under the aegis of the United Nations. The Sustainable Stock Exchanges Initiative (henceforth, SSEI) aimed expressly to elaborate a model guidance for ESG reporting to investors in collaboration with exchanges around the world and other crucial international business organizations and CSR advocates (UNCTAD, UN Global Compact, UNEPFI, PRI). This model guidance has been complemented with key performance indicators in 2015 by the World Federation of Exchanges (henceforth, WFE), which is the international association of exchanges and represents the “voice of the global market infrastructure.” These indicators have been eventually revised in the summer of 2018.

Most of the corporate law and financial economics analysis of sustainability focus on how corporations or investors which take into account ESG issues perform, or how to technically provide meaningful information to investors. At the same time, ESG factors disclosure is

7 The historical development from “doing good to do good” to “doing good to do well” is analyzed by David Vogel, THE MARKET FOR VIRTUE 17-24 (2005).
8 The practice of risk identification depends crucially on evaluation practices that have a relational character, see Asa Boholm & Hervé Corvellec, The role of Valuation Practices for Risk Identification, in RISKWORK: ESSAYS ON THE ORGANIZATIONAL LIFE OF RISK MANAGEMENT 110 (Michael Power ed., 2016).
9 Exchanges fundamentally operate as trading systems and contribute to the construction of the market through data dissemination and order execution. The regulatory functions of exchanges concern both trading activities and listed corporations, RUBEN LEE, RUNNING THE WORLD’S MARKETS 87 (2011).
14 For reviews of these studies see infra note 224.
15 Discussions about how to provide meaningful information to investors can be found in Daniel
deemed a crucial tool that would foster a reallocation of capital towards sustainable corporations. Through these lenses, ESG factors are seen as risks to avoid or business opportunities to exploit. However, these studies do not always delve into the structure and content of the metrics developed to assess sustainability corporate performance.

This paper disentangles ESG factors disclosure from corporate social responsibility and socially responsible investment in order to shed light on the architecture and institutional dynamics of non-financial factors disclosure and their assessment as business risks. Delving into the genealogy of the SSEI and the WFE schemes as a case study allows to cast a more nuanced light on the concept of the “sustainable corporation” and its exact meaning. Since disclosed information serves as a basis to build the category of the sustainable corporation, the analysis of this dynamic is crucial to navigate the alleged new reconciliation between corporate activities and sustainability. Moreover, the analysis of the indicators production process makes it possible to understand the power dynamics underlying ESG factors disclosure and provides insights on how the allocation of regulatory responsibilities crucially determines outcomes in the design of the framework that is supposed to guide the reallocation of capital in line with sustainability imperatives.

In order to analyze ESG and sustainability disclosure and its specific characteristics, the paper provides the first investigation of the SSEI and WFE frameworks for reporting ESG issues to investors. Attention is devoted to the development of this new global infrastructure for ESG considerations reporting, which are the forces behind it and how it produces knowledge and governance effects. In fact, it is impossible to explain the emergence of this new paradigm and how it is built without understanding the underlying institutional dynamics and the legal framework into which the main actors navigate. This analysis sheds light on how global governance regimes are produced, how stock exchanges are main actors of financial market regulation and how the concept of sustainability is built according to the logic of the players involved.

To describe the functioning of this disclosure framework it is insufficient to think of investors as demanders and users of ESG issues information and corporations as the recalcitrant target of these metrics. In fact, this supply and demand scheme disguises the role played by most of

the actors involved and reduces hotly contested political matters to technical issues. Furthermore, that would risk reducing *ad unum* the conflicting interests existing within general and ample categories as “corporations” and “investors”. Finally, this simple model doesn’t say much on the relationship between ESG issues that investors are concerned with and the more general idea of the sustainable corporation, that is supposed to solve some of the aforementioned global challenges.

The paper advances a composited theoretical framework for assessing the production of transnational global governance, complementing three central insights. First, the conceptualization of indicators as technologies of global governance. Second, the conceptual model developed by Büthe that describes four sets of groups to understand the production and use of indicators. Third, the theorization of the role of transnational financial associations as fundamental institutions for the expansion of global finance and production of corporate governance regulation in several arenas. Complementing these insights allows us to understand both the dynamics and power effects internal to the actors involved in the production and use of the indicator as well as the more political role that the production of the indicator has at the global level.

The paper makes several contributions to existing scholarship: (i) it identifies why the call for ESG factors disclosure emerged, how it differs from CSR and SRI, and which is the underlying concept of sustainability that is embedded into the indicators; (ii) the proposed conceptual framework allows to provide the first analysis of the genealogy and production of the SSEI-WFE indicators, its political economy, and how and why the allocation of regulatory responsibilities deeply affected the final indicators. Moreover, the framework can be deployed to study other sustainability issues disclosure frameworks; (iii) finally, the limits and contradictions of business risk ESG factors disclosure are individuated as rooted in the political economy of the modern corporation, whilst it is discussed how third parties interested in a broader concept of sustainability should interact with business-focused ESG factors disclosure.

The argument proceeds as follows: Part II provides a brief history of

16 Kevin E. Davis, Benedict Kingsbury & Sally Engle Merry, *Introduction: Global Governance by Indicators*, in *GOVERNANCE BY INDICATORS* 3 (Kevin E. Davis et al. eds., 2012).
17 Tim Büthe, *Beyond Supply and Demand: A Political-Economic Conceptual Model*, in *GOVERNANCE BY INDICATORS* 29 (Kevin E. Davis et al. eds., 2012).
CSR and SRI in order to analyze how the shift to business-case ESG reporting consummated and why it represents a significant turn. Part III presents the analytical framework adopted. Part IV assesses the production of the SSEI 2015 model guidance and part V addresses the WFE production of key performance indicators. Part VI considers the implications of the analysis provided.

II. FROM CSR TO SRI AND ESG INDICATORS: ACRONYMS AND BEYOND

Between the end of the seventies and the beginning of the eighties, a deep turn affected corporate culture and managerial behavior in the US and the UK, bringing to the forefront shareholder value maximization\(^\text{18}\) as the guiding principle for the management of corporations. Agency theory,\(^\text{19}\) a branch of neo-institutional economics,\(^\text{20}\) formally articulated several reasons why managing a corporation with the sole objective of maximizing shares value turned out to be in the interest of society as a whole.\(^\text{21}\)

A prominent line of research carried out by four financial economists,\(^\text{22}\) argued that legal origins and legal rules were crucial in financial market development and tested these assumptions empirically\(^\text{23}\). Whilst these

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22. The reference is to the many foundational papers of the so-called “gang of four,” Rafael La Porta, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert Vishny.
studies did not hold further empirical tests, they constituted the basis for exporting rules that empowered shareholders all around the globe. Such an export was sustained proactively by international organizations, namely the World Bank by its doing business report and the OECD by its principles of corporate governance, and stock exchanges constituted a privileged place to implement rules outside of the formal legislative process. The “end of history” cultural humus provided the necessary political support for implementing these reforms even across the more social democratic continental Europe.

The main countertendency to that broad consensus was represented by team-production theory of the corporation and by corporate social responsibility (henceforth, CSR) advocates. Even if it is legitimate and indeed realistic to be doubtful about the real transformative force of CSR, the request for the adoption of ethical codes or best-practices by multinational enterprises represented a field for contestation of some of the most disturbing sides of financialized and global capitalism. Moreover, the expansion of transnational trade and the creation of global

26 It has been argued that the doing business report has contributed to the spread of a narrow neo-liberal conception of the relationship between law and development, Tor Krever, Quantifying Law: Legal Indicator Projects and the Reproduction of Neo-Liberal Common Sense, 34 THIRD WORLD Q. 131, 140-42 (2013).
28 With regard to corporate law, the most notable contribution in this vein has been an article by Henry Hansmann and Reinier. See Henry Hansmann & Reinier Kraakman, The End of History for Corporate Law, 89 GEO. L. REV. 439 (2000).
29 Katelouzou & Siems, supra note 25.
value chains and global production networks as the primary organizational structures for transnational production posited a peremptory challenge to the effectiveness of state-centered and national regulation. At least in this regard, ethical codes and best practices adopted by transnational corporations seemed a minimal, but nonetheless beneficial, way to approach regulation of transnational entities.

Apart from defensive CSR adopted after a scandal or because of the pressure of activists, some business leaders embraced CSR and sustainability as a way of advertisement and legitimization or because of personal beliefs. It is necessary to stress that CSR involved a dialogue between the corporation and stakeholders, and that the political battles by NGOs were directed against determined business practices (about minors’ labor, human rights, deforestation and so on). In a world of empowered shareholders and of institutional investors, the companion to CSR was socially responsible investment (henceforth, SRI) that reflected a similar phenomenon but concerning investors.

The following sections aim at explaining and comparing the different phenomena of CSR, SRI and how they interact with ESG reporting. Despite the recurrent conflation of these paradigms in the literature, disentangling them is necessary to fully appreciate the development of the transnational regulation about business-case ESG factors reporting. I contend that it is essential to differentiate peculiar features of all of them in order to clarify and understand the shift that ESG reporting has undergone in the last years and how this affects the approach of corporations towards ESG issues at the global level. Furthermore, this differentiation is crucial to understand how global actors that were skeptical towards ESG elements disclosure have been enrolled in the development of the framework.

Finally, ESG factors disclosure is aimed at highlighting potential business opportunities or as a way to disclose risk factors. Therefore, it is

32 The distinction between the two forms and the debate in the literature is well explained by David L. Levy. See David L. Levy, Political Contestation in Global Production Networks, 33 ACAD. MGMT. REV. 943, 949-51 (2008).
33 On global value chain see WILLIAM MILBERG & DEBORAH WINKLER, OUTSOURCING ECONOMICS: GLOBAL VALUE CHAINS IN CAPITALIST DEVELOPMENT (2013).
34 The role of ethical codes in institutional and neo-classical economic theory is discussed by Guglielmo Forges Davanzati. GUGLIELMO FORGES DAVANZATI, ETHICAL CODES AND INCOME DISTRIBUTION (2006).
35 Correspondingly, ESG valuation techniques should be accepted also within financial institutions that assess the value of financial products. An insightful ethnographic study about the use and acceptance of ESG valuation within a big Swiss bank is provided by Stefan Leins, 'Responsible Investment': ESG and the Post-Crisis Ethical Order, ECON & SOC'Y (2020).
necessary to take this risk-related role of ESG issues disclosure into account in order to understand how risk is created and accounted for, as well as how the political economy of the corporations and stock exchanges interact with risk factors.

A. CSR

A common definition of CSR does not exist, but the expression means different things to different actors. The main distinction that is generally drawn is the one between those who emphasize the voluntariness of the behavior and those who focus on the coexistence in business strategies of profitability and ethical, social and environmental considerations. For the purposes of this paper, we can overlook this distinction and generally define CSR as a set of business practices that do not focus solely on the improvement of the financial performance of the firm, but also on their score on a responsibility scale, that generally involves environmental and social considerations. Whilst the beneficial effects on corporate performance of these practices are debated and contested, it has been convincingly argued that if these practices were always value-enhancing they would have been spontaneously adopted by shareholders and managers, even conceding that in some cases market failures or structural factors of the economy could prevent some profit enhancing strategy.

Whilst CSR practices have been known for a long time, CSR arose to prominence both as a result of contestation of corporate behavior in the

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37 CSR practices are criticized both by right-wing and left-wing scholars: right-wingers critique them because they interfere with the primary purpose of the corporations: enhancing shareholders value. Left-wingers are skeptical because CSR is constrained by the profit-seeking purpose of the corporation and, whatever the real benefits, serves as a powerful legitimizing tool. See Luc Fransen, *Embedding the Multinational Corporation in Transnational Sustainability Governance*, in *THE CORPORATION: A CRITICAL MULTI-DISCIPLINARY HANDBOOK* 257, 259 (Grietje Baars & André Spicer eds., 2017).


‘90s\(^{41}\) and as a strategy of corporate marketization at the global level\(^{42}\), CSR (and after that SRI) has been primarily used to solve a potentially unmanageable problem: how can corporations – particularly when they act through global value chains or global production networks\(^{43}\) – be held accountable for the actions committed in a third-world foreign country?\(^{44}\) It is clear that the investment flow is at least partially advantageous to the host country and that the country itself lacks the means to tackle harmful actions,\(^{45}\) because of the imbalance of economic power and the potential availability of an easy exit strategy for the corporation.\(^{46}\) CSR represents a form of private regulation and governance that does not derive its authority from government\(^{47}\) and presents a complicated relationship with formal public regulation.\(^{48}\) Whilst it is debatable that every function carried out through private governance mechanisms in the CSR context could be carried out by the State, it is also true that CSR regulation generally extends to traditionally state-occupied regulatory areas.

\(^{41}\) “In the mid-1990s, CSR became a battle cry of rights organizations, a concept representing consumer expectations, an issue debated by national governments and international bodies, a topic of intense scientific research, and eventually a crucial component of corporate operations.” Ronen Shamir, *Capitalism, Governance and Authority: The Case of Corporate Social Responsibility*, 6 Annu. Rev. Law Soc. Sci. 531, 537 (2010).

\(^{42}\) This is well represented by the survey of CSR literature in management academic journal by Niccolò Pisani et al., *How Global Is International CSR Research? Insights and Recommendations from a Systematic Review*, 52 J. World Bus. 591, 595 (2017).


\(^{45}\) This inability is present even when the host country has strict laws on the books but lacks an appropriate enforcement apparatus. Mayer & Gereffi, supra note 44, at 1. It has been argued that governmental and international organizations’ standards-setting functions for cross-border economic activity have been hampered for two reasons: (i) the difficulty to enroll developing countries because of the perceived negative effects of more stringent regulation on competitiveness and foreign investments inflows, and (ii) the possibility to challenge these standards according to WTO law. Fransen, supra note 37, at 258. Such an argument is also developed by Bartley, who reports that, in order to support sustainable forestry, certain trade restrictions would have been illegal under international treaties but a private labeling program would have been permissible. Tim Bartley, *Certifying Forests and Factories: States, Social Movements, and the Rise of Private Regulation in the Apparel and Forest Product Field*, 31 Pol. & Soc. 433, 447-48 (2003).

\(^{46}\) Such an exit strategy is even easier when global production is organized along value chains through contracts, and the local manufacturer has not developed specific expertise that is not easily replaceable.

\(^{47}\) Vogel, supra note 7, at 9.

The first reason why the 90s saw the explosion of CSR is the internationalization of trade and investment in that period. As Vogel writes:

What explains the growing importance of CSR since the early 1990s? Much of the answer is linked to the expansion of global and national markets. At the international level, the trend is driven by the growth of world trade and investment. At the national level, it reflects increasing privatization and economic deregulation. While these developments have produced many economic benefits, they have also generated dissatisfaction with some of the consequences of globalization and liberalization—as reflected most dramatically in the demonstrations mounted by protesters at many international business and political meetings.

The second reason is probably the end of the bipolar world, the historical defeat of socialism and the compression of workers’ political power in the ‘80s: CSR has sometimes evolved and reinforced the “neoliberal turn” rather than being a countervailing force.

CSR has sometimes had an adversarial stance and generally involves a dialogue (or conflict) between the corporation and some social groups that are external to the corporation itself. The typical cases of adversarial CSR arise either when an NGO mounts a public campaign against a specific corporation because of determined practices, or because regulation in a specific area is required after a scandal. In other cases,
directors voluntarily and spontaneously engage in responsible behavior;\textsuperscript{56} the most prominent example is the commitment to the UN Global Compact by CEOs of many giant corporations. Even if also in this case the adoption of responsible practices is still part of a broader political economic context where corporations compete for authority with states, international organizations and NGOs,\textsuperscript{57} the bulk of this second kind of CSR practices is characterized by their voluntariness and the fact that business leaders are adopting determinate practices in an unconstrained way in order to enhance the image\textsuperscript{58} of the corporation.\textsuperscript{59}

Even when the adoption of CSR measures is not the outcome of a struggle on a specific issue with third parties, it is nonetheless directed to third parties;\textsuperscript{60} while these practices are also justified as enhancing corporate performance, they are not exclusively directed at that. Virtue,\textsuperscript{61} moral value judgments and the recognition that responsibility involves a relationship between the corporation and stakeholders accompany the adoption of responsible practices. Despite the broad adoption of these frameworks, they have been deemed ineffective to protect human rights and the environment because they lack enforceability apparatuses and often focus more on reporting rather than on substantial outcomes.\textsuperscript{62}

Furthermore, voluntary CSR deals mainly with win-win situations, often

\begin{itemize}
\item public contestation and the birth of businesses’ codes of conduct in the 90s is made by Mayer and Gereffi. See Mayer & Gereffi, \textit{supra} note 43, at 5.
\item The adoption of voluntary CSR practices generally interacts, is supported by, or relies on international organizations legal instruments, governmental authority and private law. Shamir, \textit{supra} note 42, at 542.
\item Power remarks that: “In a space between two logics, fears of legal liability and reputational damage on the one hand and management opportunities for enhanced reputation and shareholder value on the other, earlier critical discourses of CSR have been transformed, interlaced with rhetorics [sic] of strategic significance, and have acquired greater currency within large organizations.” \textit{Id.} at 134. It is of course possible that these practices correspond to the subjective preferences of managers and CEOs: nonetheless, such a personal preference distinction is not particularly useful in order to analyze CSR as a structural phenomenon at the global level.
\item Id. at 134 (noting that the concept of reputation has mediated a transition from a traditional conception of critical CSR to a novel one based on meeting society’s expectation as a praxis of risk management).
\item Vogel, \textit{supra} note 7 at 2. (“[B]usiness virtue – that is, practices that improve the workplace and benefit society in ways that go above and beyond what companies are legally required to do.”)
\end{itemize}
missing the nature of the capitalist production and accumulation process, and generally win-lose situations are neglected. Voluntary CSR, apart from being read as propaganda and panacea, can be read as an instrument for capital to commodify its own crisis in order to access new markets – as the ones once occupied by public welfare – or to produce new – at least partially contested technologies – the corporation needs to present itself as responsible, legitimate and sustainable. Finally, the theory underlying CSR is developed on Habermas’ work on deliberative democracy and the accent on the deliberative process tends to avoid the problem of political authority and enforcement.

What we could take away from this short discussion and that is important to understand the new ESG reporting frameworks is that CSR: (i) involves some form of discussion of business practices and their effects on third parties; (ii) even when it is value-enhancing, it is not primarily justified as a business strategy; (iii) it is enacted by corporations and is not primarily addressed to investors; and (iv) it is generally – albeit sometimes loosely – moral based.

B. SRI

Whilst the CSR movement focuses on corporations and their impact on third parties, the SRI wave focuses on investors and their investment practices. SRI theory and practices gained momentum during the apartheid period in South Africa, as activists called for a complete boycott of businesses that invested in South Africa or for divestment from those

64 When the pursuit of a responsible behavior could harm profits or when business activity is in contrast with social and environmental interests.
67 Id. at 110.
69 Banerjee, supra note 65, at 801.
that did not conform to certain standards, the so-called Sullivan Principles.

SRI too is not well defined, and sharp disagreement exists about its scope and frontiers. For the purposes of this paper, I define SRI as an investment strategy that combines financial purposes with investors’ social values. Whilst this definition does not distinguish between value-alignment investing and impact investing, it is sufficiently broad to include both and to illustrate how the pillars upon which SRI is based differ from the ESG reporting debate.

One of the reasons why SRI became relevant has been the enormous increase of the savings managed by institutional investors and the hybrid position that pension funds play: they should maximize return on investment for the benefit of workers, and at the same time they risk supporting business strategies ultimately prejudicial for workers. SRI is, at least partially, the other side of the CSR coin. Corporations adopt socially responsible practices, while investors pride themselves of taking into account these business models in their investment decisions. Even in the SRI case, the point of tension in the debate about its real efficacy lies at the border between the win-win situation (when social responsibility has a positive effect on profits) and the win-lose one.

Recently, the SRI framework for investment has started to be partially decoupled from moral and ethical factors and considered as an investment strategy that promises to bring higher risk-adjusted returns. Certain authors have therefore argued that SRI has been rebranded as ESG, with the addition of the “G” because of the consideration of corporate governance matters that were external to the SRI “movement”. Hence, they have labeled purely altruistic motivated investments as “collateral benefit ESG”, and the investments meant to improve returns taking into

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75 Brest, Gilson & Wolfson, supra note 73, at 2.
76 See Susanne Soederberg, CORPORATE POWER AND OWNERSHIP IN CONTEMPORARY CAPITALISM 93-98 (2011) (author highlights the limits to pension funds’ activism).
77 Brest, Gilson & Wolfson, supra note 73, at 6.
78 Schanzenbach & Sitkoff, supra note 72, at 3.
account environmental and social factors as “risk-return ESG”. Whilst this distinction grasps a fundamental turn in SRI, it also demonstrates that there is considerable confusion about the terminology and that sustainability, ESG and SRI are often adopted interchangeably. This terminology fuzziness mirrors the diversity practices and blended discourses by investors themselves about their activities, but risks to bewilder the distinction between a purely financial investment strategy and a more comprehensive one. Moreover, it is important to stress and to keep in mind the distinction between an investment strategy adopted by an institutional investor, and the reporting framework through which corporations advertise their activities and disclose potential risks.

From the above discussion the main characteristics of SRI can be qualified as follows: (i) it is enacted by investors and has the ultimate purpose of changing business behavior; (ii) it can be justified as value-enhancing but is not exclusively focused on returns; (iii) it is moral based.

The missing link in this picture is the connection between the practices adopted by businesses and the investment decision. In fact, in order to take social responsibility into account, investors have to rely on detailed information that can be adequately priced. Providing such information becomes therefore crucial to businesses: on the one side, this allows them to access and to capture the resources held by socially responsible investors; on the other side, the publicization of socially responsible practices has always been a marketization technique. Nevertheless, one of the obstacles to the production of a harmonized reporting framework has been the perception that both CSR and SRI are not strictly financial, that they go beyond what the generality of businesses care about and could hamper profits.

The different purposes pursued by the standards-setters led to the production of several private reporting frameworks that put the accent on different aspects of social responsibility. The next paragraph demonstrates that the mainstreaming of ESG considerations – meant as business risks and strategic opportunities – created the occasion for the establishment of

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79 Id. at 4.
80 Brest, Gilson & Wolfson, supra note 73, at 6.
81 Galit Sarfaty, Measuring Corporate Accountability through Global Indicators, in THE QUIET POWER OF INDICATORS, 103, 108 (Sally Engle Merry, Kevin E. Davis & Benedict Kingsbury eds., 2015) (In this regard, the GRI motto is “What you cannot measure, you cannot manage. What you cannot manage, you cannot change.” As explained by Sarfaty, this motto has motivated the GRI since its foundation.).
a framework at the global level. It also argues that this standard for reporting on ESG matters substantially differentiates the business-case for ESG reporting and investing from both CSR and SRI: ESG factors reporting deals with issues that are material, and therefore financially relevant, for corporations.\textsuperscript{82} Quite to the contrary, moral issues and stakeholders’ interests are not crucial for these reports. The failure to appreciate such a departure could provoke mistakes in the assessment of the configuration of power that these new frameworks entail.

\subsection*{C. ESG Factors Reporting}

The market for responsible investment has considerably grown over time and, in general, investors that consider sustainability issues have grown dramatically in the last years.\textsuperscript{83} In 2016, they were estimated to manage $22.89 trillion globally;\textsuperscript{84} at the start of 2018, this figure rose to $30.7 trillion.\textsuperscript{85} Nonetheless, companies around the world have struggled to provide investors, civil society and consumers with useful and realistic information.\textsuperscript{86} Unquestionably, sustainability reports are addressed to different constituencies and have therefore diverging purposes: showing corporate resilience and growth when they are addressed to investors; marketizing and ameliorating corporate image when they are targeted to consumers and civil society. In general, the different purposes reflect the ambivalence of CSR and SRI and it is not surprising that these reports are found to be insufficient and sometimes aleatory. Different private frameworks that address at least partially different targets have been established\textsuperscript{87} over time to report about “sustainability issues.”\textsuperscript{88}

\begin{flushleft}

\textsuperscript{83} Id.


\textsuperscript{85} Global Sustainable Investment Alliance, \textit{The Global Sustainable Investment Review} 8 (2018) http://www.gsi-alliance.org/wp-content/uploads/2019/03/GSIR_Review2018.3.28.pdf. However, the number is contested: i.e. JP Morgan is reported to believe that only $3 trillion are real ESG investments. \textit{See also} Gillian Tett, \textit{Ethical Investing Has Reached a Tipping Point} (Financial Times, Jun 18, 2019), https://www.ft.com/content/7d64d1d8-91fa-11e9-b7e6-60e35c678d2.


\textsuperscript{87} Brown, de Jong, & Levy, \textit{supra} note 86, at 573.

\textsuperscript{88} \textit{See} Mahmoud Ezzamel & Keith Robson, \textit{The Corporation in Accounting}, in \textit{The Corporation: A Critical Multi-Disciplinary Handbook} 180, 188 (Grietje Baars & André
Nevertheless, determining the target audience of the reporting initiative is crucial,89 and most likely it identifies the determining variable that shapes the report.90

The standards adopted by the Global Reporting Initiative (GRI)91, in their fourth version (G4), were the most widely used until the adoption of the GRI Standards at the end of 2016.92 Anyway, as the GRI website affirms, “for organizations already reporting following G4, impacts [of the new framework] on the reporting process should be relatively minor”.93 The GRI was founded in Boston by the Coalition for Environmentally Responsible Economies94 and the Tellus Institute and was initially supported by the United Nations Environment Program.95 The institutional structure of the GRI is, therefore, a mixed one, where investors, companies and civil society representatives are brought together to set the standards along which companies should report.96 Notwithstanding the mixed stakeholders composition of the GRI, the late amendments tend to depict ESG reporting as mainstream.97

The GRI standards are voluntary and incremental, and corporations can decide along which standards to report and most of the third party’s

90 Robert G. Eccles & Svetlana Klimenko, supra, note 82 (remarking that the new sustainable reporting and investing movement focuses on financially material and relevant factors and differentiates from traditional SRI, that aimed at making “the world a better place” sacrificing returns).
92 The GRI Standards have completely substituted the G4 as of July 1, 2018; after that date, a report based on the G4 is not considered as a GRI-report. GRI, Questions and Feedback, https://www.globalreporting.org/standards/questions-and-feedback/transi
tioning-from-g4-to-gri-standards/.
93 Id.
94 Ceres is a network of NGOs, investors and companies with the specific aim of fostering sustainability in business practices. See Ceres, About Us, https://www.ceres.org/about-us.
95 North, supra note 90, at 149.
97 Whilst the GRI was at the beginning aimed at the development of a voluntary framework for reporting, it has recently shifted towards hard law, helping states and stock exchanges to draft regulation. Id. at 111.
98 Sarfaty, supra note 82, at 109. A corporation is not forced to report according to all of the several environmental and social indicators but can choose and pick amongst them. Apart from the
audits on the report are limited only to the reported indicators, with obvious picking effects on the selected standards and the exclusion of the variables where performance is weak. Moreover, the degree to which GRI reports represent reality is contended. In a study concerning the extractive sector, Brown et al. have found that reporting according to GRI guidelines has not specifically empowered civil society actors and not increased third-party accountability of corporations. Boiral and Henri have raised even more serious doubts about the possibility to accomplish the comparability of the sustainability score reported along GRI guidelines, which is one of the main aims of GRI. These empirical studies seem to support the claim that, whilst at the beginning the GRI aimed at fostering accountability to civil society by corporations, the institutionalization process of the organization involved a shift towards a more business-friendly sustainability issues service provider. Finally, even if the GRI is the most popular reporting framework, a recent survey of US S&P 500 corporations showed that only a minority of the sample companies closely follows one reporting framework, with the majority either reporting according to two or more reporting standards or with only loose respect to a single framework.

Whilst the GRI are primarily addressed to corporations, the leading frameworks for detecting targets for socially responsible investors are the Impact Reporting and Investment Standards and the Global Impact cherry-picking and greenwashing effect, this possibility undermines the comparability of reports and the effective assessment of the overall sustainability performance.

100 North, supra note 90, at 161.
101 This exclusion is encouraged by the idea that performance on non-reported factors will be deemed as average rather than poor, Peter M. Clarkson et al., Revisiting the Relation Between Environmental Performance and Environmental Disclosure: An Empirical Analysis, 33 ACCOUNT. ORG. SOC. 303 (2008).
102 Brown, de Jong & Levy, supra note 87, at 572.
105 See Brown, de Jong & Levy, supra note 87, at 579. “GRI has come a long way from these heady initial years to its current institutional logic of being a tool for managing sustainability, reputation and brand by companies. Over time, the civil regulation logic has gradually faded and so has the longer-term vision of transforming corporate and social governance. One of our interviewees from the SRI sector and an early GRI participant put it this way: ‘We felt that GRI was a movement but it turned into a service organization. Not only has GRI failed to mobilize civil society groups but also its instrumental value for private regulation by way of market mechanisms seems to be modest.’”
Investing Rating System. Despite the differences with the GRI, even these frameworks have been criticized for marketizing social values and their northern-western centric governance structure. For investors, these indicators are not strictly linked to a business case for ESG and are not useful to a broader array of investors other than the explicitly “responsible” ones.

Despite the promise to fulfill harmonization, the GRI has failed in this regard. Such a failure can be explained according to Fransen and Conzelmann’s theory about the factors that produce fragmented or cohesive transnational private regulation of sustainability standards. Their comparative study, focusing on industrial characteristics of specific sectors and institutional design of sustainability standards, highlights that industrial concentration in the specific sector and the leniency of the standards and the absence of civil society organizations from the bodies which produce private-regulation are the most prominent factors to explain cohesiveness. In general, industrial and institutional factors can at least partially explain the failure to produce a cohesive framework for ESG reporting. The reporting frameworks generally encompass firms from different sectors, crucially undermining the “industrial factor”. Moreover, civil society organizations have participated, although with different degree of involvement, to the elaboration and administration of the standards.

The failure to produce a cohesive framework centered on business interests has become all the more relevant when ESG reporting and investing has been explicitly linked to business value and has become a major theme between the most prominent international investors. While CSR and SRI are inextricably linked to some non-financial performance standard, risk-return ESG investing – as it is framed by stock exchanges –

107 See Sarah Dadush, Impact Investment Indicators: A Critical Assessment, in Governance by Indicators 392 (Kevin E. Davis et al. eds., 2012) (where a thorough analysis can be found).
108 Id. at 392.
109 Brown, de Jong & Levy, supra note 87, at 573.
111 See Luc Fransen & Ans Kolk, Global Rule-Setting For Business: A Critical Analysis of Multi-Stakeholder Standards, 14 Org. 667 (2007). It should be acknowledged that the concept of “multi-stakeholder standards” is generally ill-defined and that the participatory ideal that this governance structure generally tries to foster should be assessed according to the whole life-cycle of standards (production, monitoring, and implementation).
112 See Fransen & Conzelmann, supra note 111, at 270.
113 See Ho, supra note 6, at 416-17.
is relevant to investors notwithstanding their moral commitments.\textsuperscript{114} Furthermore, the blaming of short-termism as one of the causes of risky business practices\textsuperscript{115} has contributed to foster the demand for ESG in the context of a long-term investment horizon. The link between short-termism, the necessity of changing business practices in order to avoid new regulation, and ESG factors has been explicitly made, in the context of the World Economic Forum, by one of the most prominent corporate lawyer in the world, Martin Lipton, in his proposal for a new paradigm in the relationship between investors and corporations.\textsuperscript{116} The author expressly states that the paradigm is meant to forge a private-sector solution “that may preempt a new wave of legislation and regulation such as adumbrated in the recent policy statement by Prime Minister Theresa May in the U.K.”\textsuperscript{117} and encourages corporations to incorporate ESG considerations in the development of their long-term strategies and operations, while investors are encouraged to address ESG issues.\textsuperscript{118}

Such a call for a harmonized framework centered on business interests, as well as the possibility of a regulatory backlash, have caused and are intertwined with the development of the SSEI and WFE reporting framework, which is mainly elaborated, addressed and implemented by stock exchanges around the world. The guidance and the key performance indicators reorder the dispersed frameworks for ESG reporting building a paradigm centered on business value and establish exchanges as privileged fora for the regulation. The SSEI-WFE disclosure framework discussed below has significantly contributed to the enhancement of ESG disclosure around the world registered by the KPMG 2017 report.

In the last years, the focus and aim of global ESG factors reporting have changed, led by a mix of new regulation, stock exchanges requirements and investors’ pressure.\textsuperscript{119} This wave of reporting requests is global. As at the end of 2017, four out of five of the countries where

\textsuperscript{114} Daniel C. Esty & Quentin Karpilow, \textit{supra} note 15, at 652-653.
\textsuperscript{115} See Lorraine Talbot, \textit{Why Shareholders Shouldn't Vote: A Marxist-Progressive Critique of Shareholder Empowerment}, 76 \textit{Mod. L. Rev.} 791, 812 (2013) (explaining that despite the fact that shareholders often pushed for these practices, shareholders' empowerment has been considered in the EU context, quite contradictorily, as a panacea for short-termism).
\textsuperscript{117} \textit{Id.} at 1. The report assesses that, in the absence of the adoption of a private sector solution to the short-term, unsustainable business practices currently adopted, there is a “virtual certainty” of regulatory and legislative reforms. \textit{Id.} at 7.
\textsuperscript{118} \textit{Id.} at 2.
\textsuperscript{119} See Sarfaty, \textit{supra} note 97, at 612.
corporations provide more information about sustainability issues were emerging markets: India in the first place, followed by Malaysia, the UK, South Africa, and Taiwan.\textsuperscript{120} Furthermore, Latin America corporations’ rate of reporting between the largest companies improved by 7% from 2015 to 2017, compared to a 4% improvement in North America.\textsuperscript{121} Although these data show that ESG reporting has become mainstream\textsuperscript{122} and is nowadays considered the new normal, they say nothing about what is reported and the content of reports. Whilst the rate of reporting is welcomed cheerfully as showing a new engagement by corporations with global issues and, in particular, with climate change, the rate of reporting risks being meaningless without an analysis of what is reported, which is the substantial performance of the reporting entity and the possibility to compare the corporation against other corporation and historically against previous years’ performances.

The KPMG report quoted above contends that the new reporting wave is due partially to new regulations enacted both at the national and supranational (EU) level and partially to stock exchange requirements, demonstrating the importance either of formal regulation or “self-regulation” that are developed at the level of business fora.\textsuperscript{123} Whilst corporate social responsibility was considered a non-financial and not addressed mainly to investors, things have changed\textsuperscript{124} and the “non-financial is the new financial.”\textsuperscript{125}

From the previous discussion we discern a pattern about ESG reporting in the last decade: on the one side, more and more corporations report, because of investors’ demand and because new business opportunities have been opened in fields linked to sustainability. On the other side, the mainstreaming of ESG considerations made necessary the implementation

\textsuperscript{120} KPMG, supra note 92, at 22.
\textsuperscript{121} Id. at 13.
\textsuperscript{122} See David L. Levy & André Spicer, \textit{Contested Imaginaries and the Cultural Political Economy of Climate Change}, 20 \textit{Osg. Bus.} 659, 666 (2013) (explaining that the mainstreaming of ESG reporting and attention paid to environmental issues in the investment process seems to be inspired by a techno-market imaginary. “The techno-market imaginary is located between these poles; it assumes that the environment is somewhat vulnerable, but that the climate issue is manageable through appropriate economic incentives and technological innovation, without fundamentally compromising lifestyles or economic growth. This imaginary’s positioning highlights its hegemonic appeal, by claiming to reconcile economic and environmental concerns. Indeed, an increasingly common framing of this imaginary is that low carbon technologies should be pursued for reasons of profit and environmental side benefits, such as clean air, even if the climate is not at risk.”).
\textsuperscript{123} KPMG, supra note 91, at 16.
\textsuperscript{124} KPMG, supra note 91, at 6.
\textsuperscript{125} Id. at 6.
of more cohesive frameworks centered on financial consequences of ESG factors. The framework analyzed below is part of this mutated context: despite the widespread use of the word “sustainable”, the core purpose of the report is to provide information about emerging risks and strategic investment opportunities. It is also important to underline that the factors that are picked to be disclosed, and the way they are disclosed are crucial not only because of the indicators per se, but also because they are amplified by sustainability rating, and the associated indexes, provided by third parties.

The analysis of how ESG metrics are produced and of their content is important because there is a general tendency to see the reallocation of capital to sustainable business activities as the panacea for the vast array of problems highlighted in the introduction.126 However, the concept of sustainability – as it emerges from ESG issues disclosure frameworks – does not correspond to the popular conception of sustainability. The concept of sustainability embodied in the ESG factors metrics is strictly linked to financial relevant factors. Whereas the reallocation of capital according to these parameters could for sure improve environmental or social performance, this does not correspond to the wide-ranging transformations that are needed from a macroeconomic point of view.

It should be remarked that this risk conception of ESG factors reporting creates some ambiguities, partially due to the conflation of completely different issues under the same label. Moreover, ESG factors intended as business risks entail issues related to litigation risk, potential new regulation risk, and reputational risk. While climate change surely plays the lion role in global investors’ concerns, the physical fact of climate change is not what can be dealt with by simple disclosure. Apart from the uncertainty linked to climate change and its consequences, climate change related damages will affect corporations unevenly, notwithstanding their specific attitude towards sustainability. In fact, climate change is a global issue and the sustainable business conduct of one specific corporation does not shield the very same corporation from the physical risk for operating in specific locations or from financial damages that global warming will

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126 Brett Christophers, Climate Change and Financial Instability: Risk Disclosure and the Problematics of Neoliberal Governance, 109 ANNALS AM ASS GEOGRAPHERS 763 (2019) (criticizing the idea that disclosure and market discipline can meaningfully alter investment choices to address climate change); Josh Ryan-Collins, Beyond Voluntary Disclosure: Why a ‘Market-Shaping’ Approach to Financial Regulation is Needed to Meet the Challenge of Climate Change, 61 SUERF POL’Y NOTE (March 2019) (differentiating between risk and uncertainty and why that suggests the adoption of market-shaping policies with regard to the financial system to tackle the climate change issue).
cause at the macroeconomic level in the future.\textsuperscript{127} Quite to the contrary, in the short-term it is new regulation risk, as well as potential litigation, that directly affects the value of single securities.\textsuperscript{128} Indeed, specific regulations that target GHG emitters will have a predictable financial impact on certain corporations. As an example, future regulation that makes economically not viable fossil fuel projects or specific business activities could impose severe losses on investors. Through these channels, climate change risk unevenly affects different corporations, whatever their stance about sustainability.

Another problem is that sustainable issues to be disclosed are a moving target:\textsuperscript{129} apart from being potential (as every risk), these risks largely depends on future regulators’ actions, political perspectives and campaigns targeted at specific corporations. Many of the ESG factors are not relevant because of their physical representation of reality. Their significance rather lies in the social domain, at the intersection between business activity, political and regulatory choices, activists’ campaigns, and marketing strategies. Strictly linked to this issue lie an endogenous contradiction of voluntary ESG reporting that is highlighted by the framework explored below: the information disclosed by corporations are used also by third parties to provide sustainability and reputation indexes.\textsuperscript{130} Therefore, the disclosure of information could sometimes self-create the risk for a specific corporation.

Whilst these global developments concerning ESG factors financial relevance made the creation of the framework possible, understanding its political-economy and its specific structure requires conceptualizing it through the insights about global governance and indicators. In fact, the

\textsuperscript{127} In particular with regard to environmental matters, it has been assessed that so-called common owners could push for more sustainable business models because they are concerned with portfolio level, rather than firm level firm performance. In fact, because of the economic damages of climate change and because they are exposed to the wider economy performance, common owners have an interest in combating climate change. Nevertheless, it is highlighted that common owners incentives to tackle climate change are not aligned with the GHGs reduction level that is socially optimal. Madison Condon, \textit{Externalities and the Common Owner}, 2019, on file with the Author.

\textsuperscript{128} Brett Christophers, \textit{Environmental Beta or How Institutional Investors Think about Climate Change and Fossil Fuel Risk}, 109 \textit{ANNALS AM. ASS. GEOGRAPHERS} 763 (2019) (reporting interviewees – asset managers investing in fossil fuel companies – saying that “the regulatory risks are much more material to us than the physical risks” and “[f]or now, at any rate, it is not climate change itself that matters to company value, but the response to climate change in term of political action. Of course the risk will eventually be a mix of the two (physical and political). But not yet.”)


\textsuperscript{130} Power, supra note 58, at 140.
structure and emergence of ESG factors disclosure frameworks cannot be explained as a simple response from businesses to investors’ demands. The next paragraph is dedicated to the elaboration of that conceptual framework in order to understand and assess the new regulatory framework presented afterwards.

III. INDICATORS AND INSTITUTIONAL ARCHITECTURE

A. Indicators as Technologies of Global Governance

The last decades have seen an increase in the efforts to reduce complex social phenomena to pure numbers in order to rank, allocate resources and technically assess reality and its transformation. Indicators have been one of the technologies of global governance that have been at the center of this numerical turn. Indicators have been conceptualized in the following way:

“An indicator is a named collection of rank-ordered data that purports to represent the past or projected performance of different units. The data are generated through a process that simplifies raw data about a complex social phenomenon. The data, in this simplified and processed form, are capable of being used to compare particular units of analysis (such as countries or institutions or corporations), synchronically or over time, and to evaluate their performance by reference to one or more standards.”

Despite most of the indicators have the form of rough numbers, they can also be expressed in a more qualitative form, even if they are meant to allow comparison and present elements of ranking to allow assessment of the improvement of one measured subject and comparison across different subjects.

The ESG reporting framework and the key performance indicators that will be analyzed below present several characteristics of indicators and

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131 Sarfaty, supra note 97, at 103.
133 Davis, Kingsbury & Engle Merry, supra note 17, at 6.
134 Davis, Kingsbury & Engle Merry, supra note 17, at 7.
135 Id. at 8
136 The GRI sustainability reporting framework, that shares several elements with the framework discussed in this paper, has been qualified as an indicator according to the provided definition. See Sarfaty, supra note 81, at 103 (providing definition).
have both knowledge and governance effects. The general reporting framework specifies in a qualitative way which should be the purpose for the reports, who are the addressees of the report and the reasons to report. The key performance indicators measure performance on specified parameters concerning environmental, social and governance issues.

The knowledge produced in technical terms has the effect to define what is sustainable and the meaning of sustainability itself, having therefore performative effects. This construction of the sustainable corporation is all the more relevant when we consider that the sustainability label has a marketing purpose that transcends the addressees of the report (investors), that the reports are specifically built to allow investors to assess the financial consequences of ESG factors, and that sustainable investing is seen as a way to solve broad macroeconomic and social issues, rather than solely as a way to improve financial performance. The technicalities of the numbers coupled with the specific label of the indicators have the effect to side-step the political dimension and to hide the ideology that lies at the root of the indicator itself: even the case studied below is no different.

With regard to governance, indicators are used to make decisions by several actors. Moreover, the conception of indicators as a technology of governance involves that the target of the measurement can be conceptualized as the governed and the supplier of the indicator as the governor. The governance effect consists in the fact that the target of measurement is pushed to improve its performance along the specific indicators. Nevertheless, the direction of power relations is not always straightforward, depending on the interactions between the producers, the targets and the users of the indicator.

138 Sally Engle Merry, *supra* note 138, at 84 (underlining the importance of labelling for the production of knowledge effects by indicators and the potential disconnection between the name of the indicator and content of the indicator itself).
139 “Indicators often have embedded within them, or are placeholders for, a much more far-reaching theory—which some might call an ‘ideology’—of what a good society is, or how governance should ideally be conducted to achieve the best possible approximation of a good society or good policy.” Kevin E. Davis, Benedict Kingsbury & Sally Engle Merry, *Indicators as a Technology of Global Governance*, 46 L. & SOC. REV. 71, 77 (2012).
140 The use of statistical knowledge to take administrative decisions was born with the modern state and has grown in importance ever since. Sally Engle Merry, *supra* note 138, at 85.
141 Davis, Kingsbury & Engle Merry, *supra* note 17, at 13.
142 Id. at 13.
Finally, indicators can also be an instrument to retain political power, to align different actors that have coordination problems, to occupy regulatory space and to maintain hegemony. In the specific context of sustainability, the metrics involve a specific ideology of what sustainability means and how the conflicting interests of the different actors (civil society, labor, corporations, and investors) should be aligned. The power to establish the reporting framework has the effect to claim legitimacy and crystallize a specific concept of sustainability as adequate. Therefore, the production of regulation through indicators can be an instrument to assert legitimacy – through the claim of advancing general social welfare – and prevent extensive public regulation over issues that involve class conflict, distributional issues and the exploitation of common goods.

B. Actors and Roles in the Production of Indicators

In order to overcome the theoretical shortcomings of supply and demand models of the production of transnational regulation – specifically, the obfuscation of the political nature of indicators and the political process of their supply143 – Büthe proposed to distinguish four groups of stakeholders144 involved in the conceptualization, production, and use of an indicator: rule-demanders, rule-makers, targets and users of the indicator.145 This conceptual model allows us to understand better the incentives of the different actors involved in the trajectory of indicators development146 and, specifically, the political nature of this process, departing from the supply and demand equilibrium model. Furthermore, Büthe affirms that the magnitude of the effects that indicators have on third parties that are excluded from the rule-making process highlight the divergence of this regulation model from formal democracy, where all of the affected parties have a voice in the decision-making process.147

In the context of ESG factors disclosure, rule-demanders are mainly global investors and the public institutions that sponsored the framework, contrary to what happened with regard CSR where responsible practices

143 Büthe, supra note 18, at 32.
144 These four groups can partially or entirely overlap.
145 Id. at 32.
146 The trajectory of the development of an indicator consists of several phases: conceptualization, production, use, effects and impacts assessment, contestation. Kevin E. Davis, Benedict Kingsbury & Sally Engle Merry, *The Local-Global Life of Indicators: Law, Power and Resistance, in The Quiet Power of Indicators*, 1, 10-17 (Sally Engle Merry, Kevin E. Davis & Benedict Kingsbury eds., 2015).
147 Büthe, supra note 1817, at 34.
were somewhat demanded by, and addressed to, advocacy groups. Rule makers are the subjects who elaborate the indicator and describe both the specific metrics to be disclosed and the principles that should guide the disclosure process. With regard to the framework disclosed below, the rule makers are a composited array of public and private organizations: the purpose and modalities that should guide the reporting process, in fact, are defined by the actors participating in the SSEI, whilst the specific key performance indicators are defined by the WFE and implemented, with potential variables, by national stock exchanges. Listed corporations are the target of the indicators that are evaluated. However, when the target can decide which factors to disclose, and can threat the final rule makers (in this case, stock exchanges) to exit a specific market, the position of the target of the indicator is more blurred. Finally, the users of the indicators are global investors that should include ESG factors in their investment decisions and sanction companies that perform poorly. However, because of the ambivalent nature of ESG risk factors highlighted above even this category is somewhat blurred. In fact, when more complete and accurate disclosure puts pressure on the shares’ price, risking to cause a specific harm, investors could prefer incomplete or inaccurate disclosure.

Whilst the analysis proposed by Büthe allows to understand which the core actors are involved in the life-cycle of the indicator, certain points that are specifically relevant to the indicator described in the paper require further clarification.

Büthe assesses that the establishment of an indicator can create power relationships in “the Dahlian sense of allowing one actor to do something the latter would not otherwise have done.” It is undoubtedly true that indicators could perform such a power function, but this is reductive: indicators can also serve as coordinating mechanisms, in order to establish or retain hegemony in the definition, delimitation, and construction of a specific field. While the Dahlian conception of power is useful to assess the internal relations of power that indicators establish amongst the actors involved, it fails to encompass the political use and function of the indicators vis-à-vis third parties, that is nevertheless at the root of the elaboration of the model itself.

149 In organizational fields, “actors struggle over the construction of economic relationships, governance structures, institutional rules and norms, and discursive frames.” Levy, supra note 33, at 944.
This four groups structure is generally further layered because the rule-makers consist of an association or of a coordinating body, that operates according to its internal logic. This layered structure should be taken into account to fully assess the life cycle of the indicator. Finally, whilst these four macro-actors are fundamental in the trajectory of the indicator, it is necessary also to consider which are the other stakeholders who could have a different interest in the social reality that the indicator purports to evaluate.

C. Transnational Financial Associations and Global Governance

The exercise of transnational private authority, even in the corporate governance field, can encounter several coordination problems among actors participating in the regulatory process, also because the solutions adopted often entail distributive issues among participants. This could impact the political activity of certain actors with similar interests and prevent the adoption of regulation that is beneficial to a specific class of actors at the aggregate level.

Several associations that exercise authority over their members deal with the same issue. Since the ESG factors reporting infrastructure analyzed below relies heavily on the role of stock exchanges, it is necessary to deal with the role of the administrators of the infrastructure of financial markets to fully understand their role. Exchanges are the main venue for corporations’ listing and represent the intersection between issuers of securities and traders. Therefore, exchanges, because of their crucial position, provide both a fundamental infrastructure for information discovery, price formation and trading, and implement specific corporate governance standards. Despite the often converging

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151 Corporations can also list their securities onto alternative trading systems, which are generally regulated in a lighter way than traditional exchanges but provide less liquidity. Nevertheless, global corporations are generally listed on major exchanges.

152 Generally, even it is not true for every specific country, trades in securities that are listed on a specific exchange should not be forcefully carried out through the venues of the exchange (i.e., especially when large amounts are bought or sold by a single trader, these transactions are generally carried out in dark pools). Nevertheless, trades on exchanges play a fundamental role in price formation and information discovery.

interests of corporations and investors, specifically with regards to third-party interests and the preservation of profitability, tensions can and often do arise between corporations and short-term investors or traders, because the success of a trading strategy is only loosely related to corporate performance. Such a weak nexus, as well as the different time horizons of investors and corporations sometimes put exchanges in an uneasy position about the specific rules to adopt. This pattern is further complicated by the role as standards setters of exchanges and their nature of profit-making corporations, that creates scope for conflict of interests.

Therefore, exchanges play a crucial role in the regulation of global capitalism: they mediate between the potentially conflicting interests of different actors, but at the same time develop private transnational norms that weaken the role of public regulation and aim to occupy the regulatory space, while being generally backed by state power that delegates to them the authority to establish rules. Exchanges have undergone a genetic mutation in the last 30 years, becoming market actors rather than simple market places and shaping capital markets dynamics, fostering financialization and increasing their power over market governance. Exchanges constitute critical venues to establish and enforce specific corporate governance rules, while at the same time they operate according to their logic and specific rationales and are not-neutral.

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154 Of course, sometimes the interests of different investors diverge because regulation affects unevenly different trading strategies.

155 The relationship between factors that affect firm performance and a profitable trading opportunity is well described by Schanzenbach and Sitkoff: "[b]ut a factor’s relationship to firm performance, whether ESG or otherwise, does not give rise to a profitable trading opportunity unless capital markets consistently misprice the factor in a predictable manner that can be exploited net of any trading and diversification costs. Nor does identifying such a relationship give rise to a profitable active shareholding opportunity unless it points to improved future returns net or present costs to the investor." Schanzenbach & Sitkoff, supra note 72, at 51.


157 Andreas Nölke & James Perry, Coordination Service Firms and the Erosion of Rhenish Capitalism, in THE TRANSNATIONAL POLITICS OF CORPORATE GOVERNANCE REGULATION 121, 126 (Henk Overbeek, Bastiaan van Apeldoorn & Andreas Nölke eds., 2007).

158 Id. at 124.

159 Johannes Petry, supra note 155, at 10.
to the several actors involved in the regulatory process.160

Although exchanges coordinate and regulate their members, in order to act at the global level, they need to be coordinated as well; the main arena for this coordination activity is the WFE, that represents the transnational trade association of exchanges.161 Despite being often undertheorized,162 transnational financial associations exercise a crucial role in the elaboration and diffusion of regulation amongst their members and contracting with outside groups.163 Rather than from their specific resources, transnational financial associations derive their power from their ability to enroll their participants to exercise power towards other actors.164 Their ability to enroll their members thus constitutes a fundamental link for the exercise of power and the success of the initiatives of the members themselves.

These considerations about the role of transnational financial associations entail that when analyzing the different actors of the Büthe model, we should also take into account the different layers internal to single actors (in the case below, specifically, rule makers), that operate according to their logic and substantially affect the regulatory outcome. That layered structure is all the more relevant considering that transnational private regulation generally deals with contested fields165 where granting regulatory authority distributes power in a way that is difficult to amend later. Moreover, even if the exercise of hegemony involves concessions to weaker groups,166 the possibility to decide the mode and the content of regulation allows defining the basic concepts underpinning regulatory activity and to embed a specific ideology in the mode of regulation in a way that forcefully shapes the subsequent debate.

IV. THE SSEI: A NEW FRAMEWORK FOR ESG REPORTING

The previous parts of the paper have highlighted that the CSR and SRI

160 Jonathan R. Macey & Maureen O’Hara, From Markets to Venues: Securities Regulation in an Evolving World, 58 Stan L Rev. 580 (2005) (stating that “regulation in today’s environment is systemically dysfunctional” and that “This phenomenon exhibits some of the characteristics of a “race to the bottom” or a “competition in laxity” in which competitive conditions provide incentives for exchanges to refrain from enforcing their own investor protection rules for fear of losing market share”).
161 See WFE, About, https://www.world-exchanges.org/about.
163 Id. at 32.
164 Id. at 64.
165 Levy, supra note 33, at 948.
166 Id. at 952
approaches to ESG factors disclosure created a fragmented regulatory landscape, where different frameworks were elaborated and used, and where moral considerations were mixed with financial, business and marketing ones. The mainstreaming of ESG factors and the focus on their financial relevance called for more harmonized frameworks – explicitly focused on business value: one of those was developed by the SSEI and the WFE. In order to conceptualize this framework and to understand its political economy, the theoretical model outlined before will be used. The following parts of the paper will describe and assess the emergence of this new disclosure framework and will trace more general considerations about the substance and meaning of the “sustainable” corporation as it emerges from ESG factors disclosure paradigms.

A. The SSEI: Actors, Reasons, Purposes

The conceptual and political roots of the SSEI date back to 2004, when the UN Global Compact held a meeting with certain stock exchanges to explore the possibility of collaborating on sustainability issues. The initiative was followed in 2008 by two meetings between UNCTAD, the PRI and members of the international financial community that ended in a call to stock exchanges to consider the inclusion of a provision about sustainability disclosure as a listing requirement. This preliminary work resulted in the launch of the sustainable stock exchanges initiative in 2009 by Ban Ki-Moon, UN Secretary-General at the time. In its launch statement, the Secretary-General highlighted the challenges posed by 2008 global economic crisis, the economic and social disruptions caused by climate change and the ensuing problems of food and water scarcity, as well as energy security, poverty and the spread of diseases and the necessity of the joint work of UN, private financial actors and stock exchanges to address these issues and create a more sustainable, stable and inclusive economic order. This call seems to entail a broader conception of sustainability than the risk-based or strategic one typical of ESG factors disclosure frameworks. Furthermore, whilst global investors are usually depicted as the demanders of ESG issues related information, the involvement of international public institutions was crucial to sow the seeds of the framework.

167 See sections III and IV.
169 Id.
170 Ban Ki-Moon, supra note Error! Bookmark not defined.
Until 2012, the main work of the SSEI unfolded in Global Dialogues where the three founding members (UN Global Compact, UNCTAD, and PRI) were joined by representatives of the WFE, IOSCO, national exchanges, and institutional investors. At the third Global Dialogue, held in Rio de Janeiro in 2012, UNEP-FI became the fourth organizing partner, completing the governance and organizational structure that still characterizes the SSEI. Consequently, exchanges were not the main sponsors or demanders of the regulatory framework. Instead, investors’ demand, business leaders (specifically through the Global Compact) and the SSEI organizing partners (which encompass UN bodies as UNCTAD and UNEP) focused on exchanges as the best subjects for implementing the existing private transnational regulatory structure.

According to the four players paradigm outlined above, the rule demanders, in this case, are the public and private organizations that tried to build consensus about the development of the reporting framework. This remark allows casting the category of rule demanders in a nuanced light. To recognize that the demanders of the rule were part of the institutional enterprise to produce the framework and that those did not correspond to the targets nor the users of the disclosure framework allows to immediately realize that the demand for the rule was entangled from the beginning with a political project, a specific vision of ESG disclosure and the blurred concept of sustainability.

Despite the participation to the Global Dialogues of NGOs, it is clear from the published overview of the meetings that from the very beginning

173 SSEI, supra note 169.
174 The concept of demand is immediately linked to demand and supply curves of microeconomics and is therefore entangled with the idea of actors that passively receive the rules. In this sense, there is a mismatch between the term used – demander – and the four actors paradigm that is apt to describe the complexity of the category of demanders through its formal dissociation from targets or users.
175 As the concepts of CSR and SRI, also the meaning of sustainability is contested and different approaches can be taken depending on the underlying economic assumptions, distributional considerations and value judgements. Furthermore, there is no agreement as to whether different aspects of sustainability (specifically, environmental and social) should be treated and dealt with together or separately. For a discussion of the epistemology of sustainability and the underlying economic and philosophical theories that lie behind the different approaches, see Sigurd S. Vildåsen, Martina Keitsch & Annik M. Fet, Clarifying the Epistemology of Corporate Sustainability, 138 ECOLOGICAL ECON. 40 (2017).
stock exchanges and listing authorities\textsuperscript{176} were considered the privileged \textit{fora} to guide companies on ESG disclosure and eventually require mandatory ESG disclosure as a listing requirement. Investors, exchanges and regulators were identified as the key actors who should have come out with new solutions and options.\textsuperscript{177} Investors’ participation to the project insured that a business case for ESG disclosure was made.\textsuperscript{178} Because stock exchanges\textsuperscript{179} sit at a critical juncture between investors and companies, they are at the best place to facilitate ESG disclosure\textsuperscript{180} in the absence of a public framework. Nevertheless, from early on the specific mode of regulation focused on the necessity to enroll business actors and, therefore, risk based ESG took the central stage.

The success of this narrow focus for the enrollment of exchanges is evident from the comparison of the 2010 and 2012 meetings overview. Still, at the 2010 Global Meeting, only a minority of stock exchanges would consider altering the listing requirements to mandate ESG disclosure.\textsuperscript{181} After only two years, at the 2012 third Global Meeting, a majority of the stock exchanges recognized the necessity of a uniform global approach to ESG disclosure\textsuperscript{182} and the first five exchanges expressly committed to advancing ESG disclosure in their market.\textsuperscript{183} Such a swift change of attitude demonstrates the importance of market infrastructure organizations and transnational financial associations in building consensus and aligning members’ preferences concerning a specific kind of regulation: the layered structure of the rule makers (transnational association and single exchanges) was fundamental to enroll the members of the association in the regulatory enterprise.

The dominance of stock exchanges in the governance of the SSEI is

\textsuperscript{176} Depending on the country, the authorization of the listing is granted by the stock exchange administrator, a public administrative authority empowered to supervise capital markets, or both.

\textsuperscript{177} SSEI, \textit{supra} note 173.

\textsuperscript{178} As James Gifford, Executive Director of PRI remarked: "Disclosing ESG performance data in a systematic way gives investors additional confidence that a company is effectively managing its risks and opportunities. The Sustainable Stock Exchanges initiative, which is led and supported by investors, points to a clear business case for global stock exchanges to play a role in promoting transparent and sustainable financial markets." SSEI, \textit{supra} note 173.

\textsuperscript{179} Stock Exchanges have historically performed a critical role both in the regulation of trading activities and listed companies and the distribution of administrative powers between exchanges and regulators has generated different governance structures, see Stavros Gadinis & Howell E. Jackson, \textit{Markets as Regulators: A Survey}, 80 \textit{SOUTH. CAL. L. REV.} 1239 (2007).

\textsuperscript{180} SSEI, \textit{supra} note 5, at 4.

\textsuperscript{181} SSEI, \textit{supra} note 173.

\textsuperscript{182} SSEI, \textit{supra} note 172.

\textsuperscript{183} SSEI, \textit{supra} note 173, at 6.
also highlighted by the institutional structure of the body. The policy direction and general guidance of the initiative, as well as the alignment with UN objectives, are vested in the governing board, which is composed of four of the CEOs or Directors of the UNCTAD, UN Global Compact, PRI and UNEP-FI. The Governing Board appoints the Advisory Committee, which is composed of major stakeholders in the area and provides strategic advice, as well as the Ambassadors, who promote SSEI work. The SSE Partner Stock Exchanges, which are defined as the “SSE’s main stakeholder” have a double role to play: on the one side, they “play a crucial role in setting the strategic direction of the SSE initiative through the SSE Consultative Group”. The Consultative Group is composed of Partner Exchanges and other SSE stakeholders from capital market groups; it meets quarterly to discuss, share research or expertise and its members contribute to specific outputs. On the other end, the progress of member exchanges in fostering sustainability is monitored and reported in a publicly available fact-sheet. In order to join the initiative, the efforts of stock exchanges are limited to endorsing this statement publicly: “[w]e voluntarily commit, through dialogue with investors, companies, and regulators, to promoting long term sustainable investment and improved environmental, social and corporate governance disclosure and performance among companies listed on our exchange” and to submit their progress on the fact sheet. This governance structure promotes the role of exchanges and other capital markets stakeholders in providing technical guidance, policy direction, and advice, whilst the final decision power is vested in the Governing Board.

At the SSEI level, there is an evident lack of enforcing mechanisms. Exchanges are mandated to show and report their progress, but even acknowledging for some potential peer pressure to advance, no mechanism assures that meaningful improvements are made. Besides, none of the bodies of the platform can take decisions that are binding for

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184 A chart and a brief explanation are available at SSEI, Governance, https://sseinitiative.org/about/ (last visited Jan. 14, 2019).
185 Id.
186 Id.
187 Id.
188 Id.
189 Id.
191 Peer pressure has been a powerful strategy to push for reforms and changing of regulatory attitudes at the international level; i.e., with regard to the liberalization of capital flows and the diffusion of the OECD Code of Liberalization of Capital Movements. See RAWI ABDELAL, CAPITAL RULES 93-98 (2007).
the other members. The complete voluntariness of the initiative caps the possibility of adopting ESG disclosure that would risk going against listed corporations or trading investors’ interests as represented by exchanges.

**B. The SSEI Model Guidance**

The work towards the preparation of model guidance on ESG disclosure accelerated when the WFE established a Sustainability Working Group in March 2014, “with a mandate to build consensus on the purpose, practicality, and materiality of Environmental, Social, and Governance (ESG) data.” The Sustainability Working Group was meant as a fundamental expression of the will of the WFE to advance “transparency and fairness in the capital markets” and provided input to the elaboration of the model guidance. Because many of the WFE and SSEI stock exchanges members overlap, the involvement of the WFE was a major turning point towards the issue of more comprehensive guidance.

In the same month, Ceres “in collaboration with BlackRock and other major institutional investors, today announce an initiative to engage global stock exchanges via the World Federation of Exchanges (WFE) on a possible uniform reporting standard for sustainability reporting by all exchange members.” The proposed listing rules were comprehensive in approach and scope: in fact, a listing rule is more

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193 Id.


195 “Ceres is a nonprofit sustainability organization working with the most influential investors and companies to build leadership and drive solutions throughout the economy. Through powerful networks and advocacy, Ceres tackles the world’s biggest sustainability challenges, including climate change, water scarcity and pollution, and human rights abuses.” Ceres, *About Us*, https://www.ceres.org/about-us (last visited Jan. 14, 2019).


stringent than simple guidance on how to disclose. As predicted by Catà Backer, the wideness of the listing rule has generated pushback from businesses, and the SSEI model guidance is less ambitious and strictly focused on the business case for ESG disclosure.

These developments were followed by the issuance of the SSEI model guidance on reporting ESG information to investors. The model identifies stock exchanges as sitting at a crucial juncture between investors, listed companies and regulators and assesses that the lack of clear guidance on how to disclose ESG “creates a challenge for investors seeking a comprehensive view of a company's material issues.” Because of the increasing relevance of ESG information to the investment process, the model guidance “lays out the business case for reporting on ESG data, as well as basic principles to guide the reporting process.” The guidance constitutes henceforth a model for exchanges to establish their guidance, suitable to the specific and local market conditions. Despite the recurrent assessment that the model is not binding and is meant not to be so, it indicates the pathway towards ESG disclosure. The guidance equates the terms “sustainability” and “ESG” and defines them as “encompassing the broad set of environmental, social and governance considerations that can impact a company’s ability to execute its business strategy and create value. While ESG factors are at a times called non-financial or extra-financial, how a company manages them undoubtedly has financial consequences.” This definition is centered on their potential adverse effects on the value of the company and treats ESG factors management as a form of risk management. However, the whole report is pervaded also by the idea that ESG issues sometimes represent an opportunity, specifically with regard to human capital and brand

199 Id. at 42.
200 SSEI, supra note 5.
201 Id. at 7.
202 As remarked by Larry Catà Backer, the pieces of information that are disclosed are crucial for the pricing process: “This role is particularly significant because of the way it affects the operating cultures of enterprises which seek to trade their securities on these exchanges. Though ostensibly targeting disclosure relating to price, the decisions about what must be disclosed, and how and where those disclosures must be made, and to whom, play an enormously important role in the way enterprises approach their operations.” Catà Backer, supra note 199, at 41.
203 SSEI, supra note 5, at 7.
204 “It is important to note that while this document primarily uses the term “ESG” because it is commonly used among investors, the term “sustainability” is used interchangeably as it is more common among companies. While subtle nuances exist, for the purpose of this guidance, both terms are seen as [...]” Id. at 11.
205 Id. at 11.
marketization.\textsuperscript{206}

The reasons for reporting stick to a rather narrow business case for ESG and are identified as the investors’ interest in ESG factors, the necessity to stay ahead of regulatory development and the purpose of strengthening financial performance.\textsuperscript{207} On the one hand, the model guidance expressly concerns communication between the company and investors;\textsuperscript{208} on the other, the necessity to interact with other stakeholders is recognized in so far as they can have an impact on value creation.\textsuperscript{209} The narrow conception of ESG is all the more evident in Annex C to the model guidance, where the primary objectives for reporting are identified as access to capital, profitability and growth, compliance and risk management, corporate reputation and branding, information flow, enhanced investor relations and engagement.\textsuperscript{210} Whilst these primary objectives have sub-specifications, they connect ESG disclosure with business value; the connection with stakeholders' welfare is subsumed under the necessity to innovate, enhance competitiveness and foster corporate reputation.\textsuperscript{211}

The core of the model guidance consists of the principles guiding the report preparation: the board of directors should oversee the report preparation while selected personnel and senior management should provide the strategic input.\textsuperscript{212} The guidance suggests identifying the audience of the report as the company’s top investors, specifically the ones that could be more interested in the long-term risks faced by the company. In order to define which ESG information to report, corporations should understand which ones are material for investors and business value.\textsuperscript{213} As the guidance recognizes the critical audience for the report also determines which is the crucial information to disclose: what is material for shareholders may be different from what is significant to society.\textsuperscript{214} This potential contradiction – and the clear focus on shareholders of the report – demonstrate the novelty of ESG factors reporting and the difference from CSR or SRI: the concept of sustainable corporation, despite the

\textsuperscript{206} Id. at 25, Annex D.
\textsuperscript{207} Id. at 12.
\textsuperscript{208} Id. at 14.
\textsuperscript{209} Id. at 14.
\textsuperscript{210} Id. at 24, Annex D.
\textsuperscript{211} Id. at 24, Annex D.
\textsuperscript{212} Id. at 13.
\textsuperscript{213} Id. at 15.
\textsuperscript{214} Id. at 15.
common meaning of the word, corresponds to a corporation that is managed in so far as to exploit business opportunities or not to endure specific financial damages.

The model guidance proceeds with a call to report along indicators, as the GRI ones, and to provide directly in the report a comparison with industry averages and historical data215, in order to preserve the ranking functions of indicators. A specific point of tension that elucidates the purposes of the guidance is the approach to poor news disclosure. Since information on regulatory infractions and penalties is publicly available and known by stakeholders, the omission of this information could lower the report credibility. On the contrary, it is suggested that shareholders generally understand that no company has a perfect record and therefore should not penalize a corporation too much.216 This approach to “bad news” and the use of indicators is telling for several reasons. First of all, it implicitly recognizes that the preparation of the report generally involves cherry-picking and selected omissions. Rather than stating the necessity of the completeness and truthfulness of the report, for the sake of investors themselves if the information disclosed is relevant for the pricing process, the model guidance makes a “bad parresia” case for telling the truth217, without being too much concerned with the general accuracy of the report issues. As argued by Fleming, following Foucault,218 corporate truth telling “uttered within a wider set of semantic statements that are false have an important inoculation effect.”219

Whilst this suggestion to implement tactical truth-telling is apt to describe corporate self-depiction in CSR statements directed towards stakeholders, it sounds surprising when it is made in the context of a report addressed to investors, where information is meant to ameliorate the pricing process. Therefore, this conception of mistakes and deficiencies concerning problematic sustainability issues faced by the corporation reverberates the corporate-promotion function of ESG reporting rather than the idea that ESG information is crucial to the pricing process. However, this approach to cherry-picking is less surprising when we consider the role of ESG factors disclosure and the management of business risk. As it was highlighted above, sometimes the disclosure itself

215 Id. at 15-16.
216 Id. at 16.
217 Fleming, supra note 63, at 412.
219 Fleming, supra note 64, at 412.
of specific information could create the risk, and even more so when the information is picked up by external indexes providers. Therefore, the approach to bad news sits at a critical juncture between marketing, important information for the pricing process and the contentious issue of the very same shareholders’ interest in accurate information.

C. A Preliminary Approach

Summing up, the model guidance provides more of a meta-structure for ESG reporting rather than the details of the report or the reporting process themselves. The approach is consistent with the fact that the SSEI did not move in a regulatory vacuum and that the model guidance should serve for individual exchanges to implement their tailored guidance. Nevertheless, it downplays more ambitious programs, as the 2014 Ceres listing requirements, and explicitly links the reporting process to a business case and shareholder-centric logic. The definition of the audience and the rationales for reporting substantially carve out a more inclusive report, reproducing and reinforcing the centrality of shareholders in corporate governance. Whilst it has been acknowledged that shareholder-centric corporate governance has slowed innovation, reduced productive investment, raised inequality and enhanced short-termism, the idea of posing shareholders as the crucial sustainability enforcers seems quite illusory. For short term traders in securities, it is almost impossible to delineate a successful trading strategy based on ESG factors. With regard to longer-term investors interested in corporate performance and potential value creation in the future, studies about the above-average performance of corporations that perform better on ESG factors are


222 Dionysia Katelouzou, *Shareholder Stewardship: A Case of (Re)-Embedding the Institutional Investors and the Corporation?*, in *CAMBRIDGE HANDBOOK OF CORPORATE LAW, CORPORATE GOVERNANCE AND SUSTAINABILITY* 16 (Beate Sjäfjell & Christopher Bruner eds., forthcoming 2019, on file with the Author) (providing a more optimistic view, along Polanyian lines, about the potential of shareholder stewardship to foster strong sustainability).

223 Schanzenbach & Sitkoff, *supra* note 72, at 40-44.
inconclusive.\textsuperscript{224} How to explain the centrality that shareholders have been entrusted as sustainability gatekeepers? The central role of shareholders as gatekeepers for sustainability efforts seems due to the historical evolution of corporate reforms implemented around the world in the last thirty years\textsuperscript{225} outlined in the introduction of the paper. However, this role is at odds with the fact that shareholder value maximization – generally sponsored by shareholders – is one of the root causes of the very same problems that the former Secretary-General Ban Ki-moon deemed in need of a solution through the adoption of the sustainability practices sponsored by the SSEI.\textsuperscript{226}

This conundrum, apart from historical and political reasons, can be also resolved when we unpack the concept of sustainability that lies at the root of ESG reporting. While sustainability is a word charged with a powerful symbolic meaning, and proponents of ESG factors disclosure highlight how sustainable corporations can tackle broader social macro-problems, the concept of sustainability that lies at the basis of the analyzed framework is rather narrow. In fact, ESG issues are considered either as risks or strategic opportunities.\textsuperscript{227} Therefore, corporations should focus on the factors that are material to their specific business and not on all the factors considered. This approach has made it easier to enroll different business actors but departs from what the framework was declared to be necessary when it was launched. The very same concept of sustainability is rather different from the common meaning of the word. Performing well along ESG factors constitutes a way of navigating turbulent and uncertain times rather implementing the much-needed changes to what is recognized as an unsustainable socio-economic system.

Nonetheless, the outlined issues about the possibility to foster meaningful, sustainable practices probably constitute the reasons why the reporting guidance could be successful – that is, being adopted and becoming widespread amongst exchanges, corporations and investors. The SSEI presents two institutional elements that are crucial for the success of private transnational regulatory schemes according to the Fransen and Conzelmann paradigm:\textsuperscript{228} loose standards from which the participants (in

\begin{itemize}
\item \textsuperscript{224} Brest, Gilson & Wolfson, \textit{supra} note 74, at 23, 24; for a review of studies delivering different results see also Allen Ferrell, Hao Liang & Luc Renneboog, \textit{Socially Responsible Firms}, 122 J. Fin. Econ. 585 (2016).
\item \textsuperscript{225} Deakin, Sarkar & Siems, \textit{supra} note 26; Armour \textit{et al.}, \textit{supra} note 26.
\item \textsuperscript{226} Ban Ki-Moon, \textit{supra} note 1.
\item \textsuperscript{227} Daniel C. Esty & Quentin Karpilow, \textit{supra} note 4, at 651 (highlighting that investors care about sustainability for various reasons, concerning both opportunities to catch and risks to avoid).
\item \textsuperscript{228} Fransen & Conzelmann, \textit{supra} note 111, at 270.
\end{itemize}
such a case, the exchanges) can opt out and the business dominance of the production and implementation of the regulatory framework. Of course, these elements foster enrollment of the market infrastructure managers, but also risk being the framework’s Achilles’ heel, creating an uneven playing field at the global level, mere greenwashing and low progress on the sustainability agenda, that would enhance the likelihood of public regulation.

The history of the development of the guidance confirms some of the underlying themes of the analytical framework advanced before. The intervention of the transnational financial association was necessary in order to enroll exchanges in the program in the first place. Furthermore, rather than producing a single set of indicators the outcome of the model guidance consists in re-orienting the practice of ESG reporting towards a business rationale logic, making a business case for disclosure of ESG factors that are considered material for investors and corporations. This is coherent with the role of investors as the users of the ESG reports and the lax enforcing mechanisms towards corporations, the targets of the regulatory framework.

This paradigm highlights the political nature of the development, demand, and issuance of the framework. It is, in fact, clear that the model guidance does not even come close to harmonizing ESG reporting frameworks, but it re-directs them. In order to pursue this strategy, even the model guidance advisory group members are predominantly from the business community – stock exchanges, corporations and investors – and only a few ones come from civil society or NGOs.

The model guidance can interact with already established reporting frameworks, as the GRI one: even in such a case, the SSEI guidance frames the way the report is prepared and the addressees of the disclosed information. However, the lack of an independent set of indicators risks undermining the ability of single stock exchanges to implement their list of metrics. Furthermore, as it has been argued above, voluntary reports such as GRI were the outcome of multi-stakeholder processes and did not forcefully limit to a business-case for ESG factors disclosure but are intermingled with CSR. It has been shown that the curtailing of the sustainability concept was necessary to mainstream ESG. Therefore, the establishment of an autonomous set of indicators could foster this disentanglement process from CSR and speed up the diffusion of ESG

229 SSEI, supra note 5, at 34, Annex I.
performance disclosure. This task has been taken up by the WFE.

V. THE WFE INDICATORS

A. The Role and Functions of the WFE

The WFE is the global association for exchanges and clearing houses.230 *Founded in 1961, the Federation was set up to contribute to the development, support, and promotion of organized and regulated securities markets in order to meet the needs of the world’s capital markets in the best interests of their users. This remains the WFE mandate today.*231 In order to qualify for the WFE, an exchange must meet and comply with stringent membership criteria.232 The WFE role consists of: representing the industry within the international financial community, providing information through the publication of statistics, harmonizing standards for the organization and conduct of the business, and supporting the expansion of the industry, also through capacity building activities and research sharing.233

The WFE encompasses the vast majority of exchanges around the world, both in “developed” and “developing” countries. It is composed of 250 market infrastructures providers, and 48,000 companies are listed on member exchanges. The aggregate capitalization of listed equity securities amounts to $ 82.5 trillion.234 The importance of being part of the association is best explained with the example of the London Stock Exchange. The London Stock Exchange left the WFE in 2013 because of divergent interests regarding dark pools and off-exchange activities235 but then applied for re-admission (completed in October 2018)236 in order to

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230 See also Lee, supra note 9, 85.
233 Id. at 494.
235 Philip Stafford, London Stock Exchange to Quit World Federation of Exchanges, FIN. TIMES (Nov. 28, 2013), https://www.ft.com/content/584714e4-582a-11e3-826c-00144feabdc0.
regain and wield more influence in the regulation-making process.\textsuperscript{237}

According to the McKeen Edwards and Porter’s definition, the WFE operates both in the social and in the regulatory sphere\textsuperscript{238} and is a transnational financial association.\textsuperscript{239} Despite the fact that the WFE is not principally engaged in the production of corporate governance standards to be adopted by member exchanges, it has been able to interact and intersect the development of the ESG reporting framework, helping to enroll global member exchanges and guaranteeing in this way the centrality of exchanges in administering the ESG disclosure framework.

The turning point for the WFE with regard to sustainability issues was the establishment of the aforementioned Sustainability Working Group in March 2014, composed of representatives of member exchanges.\textsuperscript{240} Whilst the WFE and its Sustainability Working Group were not a direct part of the SSEI governance structure, they substantially participated in the elaboration of the model guidance in two direct ways. First, as the model guidance itself recognizes, the WFE provided valuable inputs.\textsuperscript{241} Second, the exchanges that compose the WFE do, for the most part, mirror those of the SSEI Consultative Group.\textsuperscript{242} Furthermore, the WFE implemented the model guidance providing a list of indicators against which corporations should report, firstly published in 2015 and revised in 2018. Since the 2018 list of metrics makes only incremental changes to those of 2015, the 2015 indicators will be discussed first, followed by an analysis of the 2018 metrics and how they were modified. This diachronic analysis is important because it allows to give a closer look to how the indicators evolve.


\textsuperscript{238} Catà Backer, \textit{supra} note 199, at 4.

\textsuperscript{239} According to McKeen-Edwards and Porter theoretical framework, transnational financial associations are characterized by an assemblage ontology, functional differentiation as well as organizational functionality, and by a special relationship to power, that involves both power over and power to and that is crucially related to the possibility to enroll other actors for the specific purposes of the organization. See McKeen-Edwards & Porter, \textit{supra} note 162, at 24-33. Id. at 51 (expressly characterizing the WFE as a transnational financial association).

\textsuperscript{240} WFE, \textit{supra} note 193.

\textsuperscript{241} WFE, \textit{supra} note 195.

\textsuperscript{242} “Given the large overlapping membership and aligned interests of the SSE and the WFE Sustainability Working Group, the organisations co-operate where possible.” WFE & UNCTAD, \textit{The Role of Stock Exchanges in Fostering Economic Growth and Sustainable Development} 16, https://www.world-exchanges.org/storage/app/media/research/Studies_Repots/WFE%20UNCTAD%20Exchanges%20Growth%20and%20Sustainable%20Development.pdf.
B. The WFE’s Indicators

1. The 2015 Indicators

In 2015, member exchanges demanded the WFE’s Sustainability Working Group to identify the most material key performance indicators for ESG reporting.\(^{243}\) The workstream that brought to light the need to issue key performance indicators is highlighted at the beginning of the guidance:

> First and foremost, we worked closely with the United Nations Sustainable Stock Exchanges (SSE) initiative to create a substantive document: the Model Guidance (MG) on Reporting ESG Information to Investors. The MG was made public in September and provides a broad and business-centric rationale for better ESG reporting by the companies that list on global stock exchanges. The MG outlines the principles behind exchange involvement in this issue, but does not enumerate the specific data points (or Key Performance Indicators) that have the most impact.\(^{244}\)

The 2015 document (appendix 1) stresses that it should be read in conjunction with the SSE model guidance, that it is not WFE intention to dictate mandatory standards or requirements with regard to ESG disclosure and that the chosen key performance indicators are linked to the value drivers for ESG reporting identified by the model guidance.\(^{245}\) The list of key performance indicators is not meant to be prescriptive: whilst it can be used “without any alteration,”\(^{246}\) exchanges are encouraged to customize the list to better fit the needs and specificities of their markets,\(^{247}\) taking into account the levels and format of reporting and its content, in particular, if there is not a clear link between ESG reporting and financial impact.\(^{248}\) Eventually, the “discursive” part of the guidance states that the WFE Sustainability Working Group can and will provide technical assistance to exchanges in drafting ESG disclosure guidance, specifically with regard to materiality issues\(^{249}\), and affirms that if no listing requirements or comply-or-explain model about ESG reporting is adopted, then participation in ESG reporting should be marketized to listed

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243 WFE, supra note 11, at 2.
244 Id. at 2.
245 Id. at 3.
246 Id. at 4.
247 Id. at 4.
248 Id. at 4.
249 Id. at 5.
corporations through the identified value drivers.\textsuperscript{250}

The 33 key performance indicators encompass environmental, social and governance issues. In order to assess the effects of these indicators it is necessary to provide a taxonomy of their different structures. It is clear that when a specific, meaningful measure can be produced on a specific issue, the indicator is more useful for the pricing process and the investment decision. According to the previously provided definition, the possibility to deploy a ranking effect is constitutive of the nature of indicators themselves and essential to the knowledge and governance effects. Comparability and rankings nurture governance through numbers, and to be effective the selected parameters should conform to this ideal. Furthermore, if ESG issues are framed as business risks, indicators should provide meaningful information to be included in the pricing process. Whilst the complete table of the 2015 WFE guidance can be found in the appendix, we can identify three different typologies of indicators: rough numbers, ratios, and yes/no answers to the adoption of certain policies or codes.

Environmental indicators tend to require the reporting company to publish and report a rough number concerning the total GHG emissions, the carbon intensity, the total energy consumption, and the energy intensity, the renewable energy intensity, waste and water management.\textsuperscript{251} Theoretically, these indicators can be useful in providing reliable numbers for the evaluation of the energy impact of the activities of a corporation and could provide investors with a measurable quantity to assess how a potential change in the regulatory structure could affect the operating costs of the company. Nevertheless, the mere reporting by corporations according to these indicators could not provide an accurate picture of the potential regulatory costs and almost all of these numbers should be put in context - assessed against output and the specific activities carried out – in order to be adequately understood.\textsuperscript{252} Moreover, since production is generally fragmented along global value chains, reporting numbers about the environmental impact of a single corporation risks being misleading.

\textsuperscript{250} Id. at 5.
\textsuperscript{251} See appendix A.
\textsuperscript{252} Just to give but one example, when corporations claim that they source 100% of their energy consumption from renewables, there could be misunderstandings regarding the exact scope of such a claim if it is not considered taking into account the grid structure and the necessity of uninterrupted electricity. Uma Outka, “100% Renewable”: Company Pledges and State Energy Law, forthcoming Utah L. Rev. 29-30 (2019).
Clearly, from the point of view of brand advertisement, the reporting of these numbers could be useful for marketing purposes, in order to attract customers. In fact, a simple number that puts the corporation above the average about emissions can be easily and positively marketed, and the absence of more specifications could be an advantage rather than an obstacle. Moreover, apart from the pricing need of ESG reporting and the marketing function, reporting against specific metrics could help organize production by reducing operating costs and therefore outcompeting on environmental matters.

The 2015 environmental standards are completed by filling out a yes/no indicator about environmental policy, and a request about liability for environmental impact. Both standards reveal the weaknesses of the yes/no indicator. On the one hand, following an environmental policy per se does not say anything about the policy itself, its scope and the way it is operationalized. Therefore, without the provision of more information, a positive answer is very well suited to fall prey to greenwashing, but not very meaningful for the pricing process. Potential liability for an environmental impact is significant for the pricing process and should be part of the risk management function of the corporation, but the answer should be much more detailed to be meaningful and valuable. For example, it would be necessary to ask such questions as what is an “environmental impact,” or what is the threshold to consider pollution or waste an impact? And once an “environmental impact” has been defined, which are the corporation’s activities that present a risk of producing an impact?

With regard to the social factors, most of the indicators are not rough numbers, but ratios. The decision about which rough numbers should be reported is not neutral, and this is even more true with regards to the ratio indicators. The decision to compare the two terms is dictated by the specific vision of the origin of problematic issues. Generally, the environmental impact of business activity is considered an externality, and the contentious issue concerns how much should be internalized by firms and which should be the equilibrium between economic activity and environmental preservation.253 On the contrary, social issues always involve distributional issues between capital and labor254 and often

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253 However, climate economists’ view on how to tackle the climate change challenge differ on many issues along different axis. See Servaas Storm, How the Invisible Hand is Supposed to Adjust the Natural Thermostat: A Guide for the Perplexed, 23 SCI. ENG. ETHICS 1307 (2017).

254 The distribution of returns between capital and labor is one of the fundamental drivers of stock price increases. I.e., it has been argued that most of the increase in stock prices in the US starting
intersect with gender matters. Therefore, the definition of the two terms of
the ratio is highly contentious.

As it was highly predictable given the composition of the body issuing
the standards, the chosen indicators avoid direct comparisons between
employees pay, labor productivity and financial returns for shareholders,
substantially preventing any direct comparison by capital and labor share
in the results of production. The only meaningful comparison in this
regard is the CEO pay ratio compared to the median salary. A similar rule
has been implemented in the US by the Dodd-Frank Act and has become
finally operative for the 2018 proxy seasons. Whilst the real effects of
the rule are still unclear, it has been found that the result of the ratio
mostly depends on the median employee salary rather than on CEO
compensation. Thus the ratio largely depends on the employee base
being taken into account.

Although similar considerations can be extended to the gender median
salary ratio, this information risks to lose value if it is not coupled with
more detailed information, specifically the gender diversity ratio. This
would require the corporation to specify the rate of women occupying
different corporate positions and could be more valuable in assessing the
different distribution of powers in the organization. Even if the financial
relevance of these parameters is not clear-cut, they could serve as
marketing instruments and diversity is generally regarded as positive for
the performance of firms. Finally, the temporary worker and employees
turnover rate metric is useful to manage so-called human capital and the
organization of production.

The rough number indicators required under the social label are the
injury rate and the number of human rights violations filed, addressed, or
resolved. Even in this case the number could be very different according to
the business dimension that is considered: the individual company or the

from the end of the 80s has been due to a redistribution of rent from labor to shareholders, rather than
because of economic growth. See Daniel L. Greenwald, Martin Lettau & Sydney C. Ludvigson, How

255 Deb Lifshy, The CEO Pay Ratio: Data and Perspectives from the 2018 Proxy Season (Oct.
14, 2018), https://corpgov.law.harvard.edu/2018/10/14/the-ceo-pay-ratio-data-and-perspectives-from-
the-2018-proxy-season/. The technical difficulties in calculating the ratio and its meaningfulness have
been reported by Andrew Edgecliffe-Johnson, US Companies Reveal Pay Gap Between Bosses and
Workers (Financial Times, Apr 16, 2019, available at https://www.ft.com/content/1ee790f0-5da8-
11e9-b285-3acd5d43599e) (reporting the technical difficulties in calculating the ratio and its
meaningfulness).

256 Id.
companies that are part of the value chain and the production network. Furthermore, the single number without any further context prevents the comprehension of the seriousness and typology of injuries and human rights violations.257

The social factors end with two yes/no indicators about the adoption of a policy about global occupational and health, the adoption of a human rights policy or statement258 and about the prohibition of child and forced labor about the supply chain.259 Both answers, if not coupled with more data, operationalizing methodologies, and supervision mechanisms are meaningless for the pricing function of ESG information and can easily be used to exhibit a fake sustainability approach that is not duly implemented.

Finally, the governance issues have the merit to be broader than what is generally termed as corporate governance,260 in so far as they also encompass the adoption of an ethics code, a fair labor code and of a supplier code of conduct. The main problem with these broad governance standards is that a simple yes or no answer is quite meaningless, without providing more detailed guidance on the individual issues. Furthermore, the straight answer risks to be misleading, in so far formal compliances also presume to be substantial compliance, although no information about the substance is provided.261

Before providing a general assessment of the WFE level of regulation, it is necessary to assess how these guidelines were amended in June 2018. Why and how certain amendments are made helps to better understand the power dynamics amongst the four actors involved in the elaboration of the indicators.

2. The 2018 Indicators

257 The same problem with quantitative reporting of human rights issues under the GRI framework is highlighted by Sarafaty, who deems that the application of risk management practices to human rights issues can emphasize their regulatory dimension, but disregards their sovereignty dimension. Sarafaty, supra note 96, at 613.

258 Anyway, it is not apparent which is the financial impact of human rights violations and investing in activities at risk can nonetheless be extremely remunerative; furthermore, the adoption of a human rights code can become a substitute for human rights respect and a meaningful implementation policy. Banerjee, supra note 63, 88.

259 See appendix A.

260 However, the exact domain of corporate law and governance is contentious. Christopher M. Bruner, What is the Domain of Corporate Law? (University of Georgia School of Law, Paper No. 2019-04) (arguing about the historically contingent nature of the domain of corporate law, contrary to a widespread universalizing vision).

261 Sarafaty, supra note 82, at 117-19.
After the publication of the key performance indicators in 2015, over 35 stock exchanges have issued or committed to issuing ESG reporting guidance,\textsuperscript{262} the UN Sustainable Development Goals\textsuperscript{263} have been approved, and the Task Force on Climate Related Financial Disclosure\textsuperscript{264} has issued its recommendations. In order to take into account these developments, as well as the feedback received on the implementation experience, the WFE issued a revised version of its metrics in June 2018.\textsuperscript{265} Even if the guidance affirms that it is not meant to be prescriptive, but that it instead provides a summary of emergent best practices and should be used by exchanges as a baseline for their ESG disclosure policy,\textsuperscript{266} it reinforces certain points underlying the 2015 version.

The revised document (appendix 2) is composed of a descriptive part and an updated version of the key performance indicators. With regard to the purpose and organization of the ESG reporting process, the 2015 guidance substantially remanded to the SSEI model guidance. Although the paradigm for the 2018 revised metrics maintains the SSEI model guidance, it stresses that financially relevant ESG factors should be the focus of the report. The revised guidance confirms that investors are the target audience for ESG disclosure. Information should, therefore, encompass investor-relevant and decision-useful information,\textsuperscript{267} specify how these issues translate into value creation or destruction, and detail how the ESG factors impact products, the value chain, R&D investments, and operations.\textsuperscript{268} The report further states the necessity of board-level oversight of the report preparation and provides a menu of definitions of materiality for exchanges.

In general, the key performance indicators retain the same structure as the 2015 indicators: they are divided into the environmental, social and governance categories and can be qualified as rough numbers, ratios and yes/no indicators, with the strengths and weaknesses mentioned previously.

Apart from the rebranding of specific metrics, several amendments

\textsuperscript{262} WFE, \textit{supra} note 13, at 2.
\textsuperscript{263} UN Sustainable Development Goals, \textit{About}, available at https://sustainabledevelopment.un.org/?menu=1300.
\textsuperscript{264} Task Force on Climate Related Financial Disclosure, \textit{About}, available at https://www.fsb-tcfd.org/about/.
\textsuperscript{265} WFE, \textit{supra} note 13, at 2.
\textsuperscript{266} \textit{Id.} at 3.
\textsuperscript{267} \textit{Id.} at 2.
\textsuperscript{268} \textit{Id.} at 4.
have been implemented. A response or explain rationale is suggested to guide the method of reporting.\textsuperscript{269} Such a change is positive in so far it could limit cherry picking and selective disclosure that does not provide a comprehensive image of ESG practice. Even if the 2015 guidance connected the performance indicators to other reporting standards,\textsuperscript{270} the updated version remands to specific standards (even public regulatory ones) to define more clearly what should be reported and what should be considered when producing the metric. Although that is particularly relevant for what has been termed as rough number or ratio indicators, it is also relevant for yes/no indicators, in so far it specifies that when a specific code or policy is adopted, public content should be cited if available.

Finally, certain metrics that were not reported by corporations were eliminated, namely the tax transparency and the human rights indicators.\textsuperscript{271} Whilst this process is consistent with the voluntary and non-binding nature of the ESG disclosure framework elaborated at the WFE level, it highlights the shortcomings of the system, specifically the flaws of having to enroll the reporting corporations and the ambiguous distribution of power from the regulator (rule makers) and the regulated entities (target of the rules). Furthermore, this initiative to remove the indicators that are not reported or only partially reported\textsuperscript{272} fits with the new respond or explain approach to ESG disclosure and the idea that the request of information has a regulatory effect that can bring to a more sustainable economic path. Quite to the contrary, the elimination of sustainability standards that are not reported demonstrates the weakness of the system.

The standards that have been eliminated had controversial content that could foster public accountability not only limited to investors. Their exclusion from the revised set of indicators aptly demonstrates two points that have been raised before. First, the concept of sustainability issues disclosure is linked to potential business risks or strategic areas. Factors that do not represent opportunities or exposes companies only to limited risks compared to the gains of “unsustainable” practices should be excluded. Strictly linked to this is the second remark. Disclosure of certain factors could create\textit{ ex se} the risk, specifically when these issues are included in sustainability indexes provided by third parties. In this case,\textsuperscript{269} WFE 2018 ESG Revised Metrics, see appendix B.\textsuperscript{270} Specifically, the 2015 indicators identified whether reporting or consideration of the same issue was requested by the GRI G4, CDP, SASB, IIRC, and UNGC sustainability frameworks.\textsuperscript{271} WFE, supra note 13, at 2.\textsuperscript{272} Id. at 2.
exclusion of a factor from the list is a way better solution than non-disclosure by single corporations.

While the enrollment of single exchanges through the SSEI international framework and the WFE succeeded in involving exchanges, the voluntariness of participation and the lack of enforcing mechanisms showed how the necessity to continually gain consensus of both the rule makers (national stock exchanges) and the target of the rules (corporations) hampers the possibility to push further the disclosure indicators and casts a more nuanced light about the power relations between the producer of the indicators and the target of regulation. Moreover, it demonstrates the conflicted roles that global investors have as users of the indicators.

As has been already described, the success of the SSEI-WFE disclosure framework of ESG factors depends on the provision of listing rules or disclosure guidance by single exchanges. The first step requires therefore solely the enrollment of exchanges who are then left free to design their specific standards. When only disclosure guidance is implemented, the success of the framework crucially depends on voluntary reporting by corporations. The backlash for such non-reporting could be divestment, investors’ demand for more stringent disclosure provisions and exchanges’ implementing a more pervasive listing rule. The threatening force of this potential backlash is nevertheless diminished by the fact that the aggregate reporting habits of listed corporations matters, rather than individual corporations’ behavior, and it is difficult to draw a straightforward link with regulatory responses.

The WFE decision to tackle this noncompliance issue through the amendment of the key performance indicators according to the reporting practices inverts the power relationships among the indicator supplier and the target of measurement. The decision to account for target preferences in the issuance of regulation itself surely increases the level of formal compliance, but reduces the scope of regulation and undermines the regulatory binding force, starting a sort of regulatory conversation

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273 In fact, listing rules are generally binding and therefore listed corporations do not have great scope for non-compliance. Nevertheless, even listing rules allow for more nuanced arrangements when a comply or explain approach is adopted.

274 The same WFE acknowledges that in the absence of a listing rule or comply or explain voluntary framework participation should be marketized to corporations according to the identified business value drivers.

275 WFE, supra note 13, at 2.
amongst the issuers of indicators and targets, which is internal to the actors of the regulatory paradigm.\textsuperscript{276} What remains unaltered is instead the power effects towards external actors and the claim to the regulatory space, that continues to be occupied by the reporting framework.\textsuperscript{277}

C. Stock Exchanges’ Implementation

The revised version of the standards has just been implemented, and it is still early to ascertain whether exchanges at a global level are scaling up their efforts in a meaningful way to spread sustainability disclosure. Nevertheless, some results do show that the framework has catalyzed exchanges activities to become one of the main actors in the ESG factors disclosure scenario. The last WFE sustainability survey reports that exchanges, even more than regulators, are the most active subjects that encourage or require ESG disclosure and guide listed issuers on the topic\textsuperscript{278} and that a broad consensus about exchanges’ participation in the task of setting standards and metrics exist amongst the interviewed members.\textsuperscript{279}

Even the SSEI, that continues to monitor exchanges involvement and progress about sustainability issues, has found that “[c]ontinued growth in stock exchange engagement with sustainability activities indicates a market demand for more information on sustainability and a growing understanding of the materiality of ESG issues to corporate financial performance.”\textsuperscript{280}

As the graphs below demonstrate, the last years have seen a steep increase in exchanges providing guidance on how to report or requiring ESG disclosure as a listing rule, and the SSEI report connects this increase to the guidance provided by the SSEI and the WFE in 2015.\textsuperscript{281}

\textsuperscript{276} On the actors involved in the production of indicators and their roles see section II.B.

\textsuperscript{277} On the power relationships involved in the production of indicators see section II.A.


\textsuperscript{279} \textit{Id.} at 9.

\textsuperscript{280} SSEI, \textit{SSEI 2018 Report on Progress} 7 (2018), available at https://sseinitiative.org/wp-content/uploads/2018/10/SSE_On_Progress_Report_FINAL.pdf. This partially contradicts what has been found by the WFE's survey, where lack of investors demand is considered one of the main concerns of exchanges with sustainability. WFE, \textit{supra} note 278, at 3.

\textsuperscript{281} SSEI, \textit{supra} note 281, at 16.
This progress, therefore, shows that, at least at a formal level, the regulatory framework has been successful and exchanges enrollment has happened along the desired lines of the institutional entrepreneurs that set the whole process in motion. Exchanges are becoming prominent actors of ESG disclosure regulation worldwide. The engagement with sustainability by stock exchanges should continue in the next years: on the 4th of October...
2018, the WFE has published a set of five sustainability principles\textsuperscript{282} and its members have committed to foster a more sustainable financial system.\textsuperscript{283}

Nevertheless, this does not clarify the content of reporting and exactly the way in which the listing rules and the report guidance are drafted by single exchanges. This analysis should be conducted at the level of single exchanges considering the specific cases and the already existing regulations in different countries and is beyond the scope of this paper, which instead concerns the transnational architecture of ESG reporting.

VI. THE POLITICAL-ECONOMY OF THE SSEI-WFE FRAMEWORK

The previous discussion put the SSEI-WFE indicators in their political-economy context, which accounts for the power relations that the indicators create amongst the several actors. In order to do so, the paper discussed what is the meaning of sustainability at the center of ESG factors disclosure and the analysis provided accounts for the multi-layered structure of the rule-issuers in order to assess how the internal functioning logic of transnational financial associations has made the implementation of the reporting framework possible and how it has shaped it. Different questions follow from the institutional and political-economy rationales of the indicators: can the indicators be effective in providing meaningful and comprehensive information about ESG factors? Can the indicators significantly reallocate capital towards more sustainable corporations? What role do external actors, who are not participating in the elaboration of the indicator and who conceive sustainability in a different and broader way, have to contest or to exploit ESG factors disclosure?

A. Harmonization of Information Disclosure

One of the stated purposes for the project was the production of a harmonized reporting framework to allow corporations to satisfy


investors’ demands for ESG information. Although success or failure in this regard should be measured empirically after an adequate period of time, several conclusions can be drawn about the likelihood of success of such an institutional framework in providing a meaningful and comparable set of information. The following discussion is relevant also to current controversies and calls for regulators – notably in the United States – to issue guidance on ESG disclosure or provide formal and detailed rules. The contradictions and the problems outlined below indicate that model guidance issued by an administrative body would not address the structural problems of voluntary reporting and elucidate why a mandatory framework would encounter fierce opposition.

In general, ESG reporting frameworks encounter several technical issues in providing meaningful information: as found by Boiral and Henri about the GRI indicators, the chief technical issues for comparability are the qualitative nature of many indicators, the different scales of measurements adopted by quantitative metrics, the diversity of contexts where information is collected and the lack of disclosure about many metrics. As highlighted by the Authors, these issues do not depend only on functionalist and technical considerations, but also on the power structure of the reporting process.

These same issues apply to the SSEI-WFE reporting framework and undermine the probability of producing meaningful and comparable information for investors. The analyzed metrics have been labeled as rough numbers, ratios and yes/no answers, and they present the very same issues as the GRI metrics – both the quantitative and the qualitative ones. Finally, the technical issue about cherry-picking among the standards largely depend on the specific frameworks implemented by single exchanges. Nevertheless, the respond or explain approach adopted by the 2018 metrics could partially solve the issue, even if its effectiveness largely depends on the specificity and accuracy of the explanations.

284 Of course, the claims about investors’ demands for ESG factors disclosure, as well as those by corporations about their responsible behavior, should be taken *cum grano salis*, because of the sometimes striking – divergence between public speeches and claims and real practice or voting patterns. See Pilita Clark, *Time’s up for a Golden Age of Corporate Greenwashing* (Financial Times, May 19, 2019), available at https://www.ft.com/content/407260f2-787d-11e9-bbad-7c18c0ea0201.
285 Harper Ho, supra note 6, at 37-42; Jill E. Fisch, supra note 129.
286 Williams & Fish, supra note 4.
287 Boiral & Henri, supra note 104, at 291-96.
288 Id. at 301.
provided by corporations for non-reporting.\textsuperscript{289} 

The second institutional obstacle to providing meaningful and comparable data is the potential contradiction of ESG factors as crucial information for the pricing process and as a potential business and marketing opportunity. As it has been outlined, the business case for ESG disclosure made by the SSEI and the WFE involves both a defensive and a strategic position.\textsuperscript{290} The defensive rationale consists of staying ahead of regulatory innovations and avoiding the risks resulting from environmental disaster or activists’ campaigns.\textsuperscript{291} The strategic rationale is the possibility to get new business opportunities, to access new markets and to target socially responsible investors. For investors, full disclosure would be advantageous to implement a more accurate pricing process, but it could be damaging insofar as the disclosure of bad information, that otherwise would have no impact on share prices, could create financial damages. The position of investors as enforcers of regulation through disclosure is therefore \textit{per se} conflicted, insofar as many unsustainable practices fuel profits and cause share prices to rise, whilst some of them create business risks that entail a threat to shareholder value.

These contradictions create a tension between a full and accurate disclosure practice of all of the relevant information, good and bad, and a practice focused on corporate advertisement which undermines the purpose of comparability and usefulness of information. This issue is not a technical one, but instead lies at the root of the politics and purposes of implementing an ESG reporting framework. Nevertheless, this issue cannot be solved by the current framework: adopting a shared understanding that ESG reports represent only greenwashing would undermine the whole purpose of the initiative. Further, the issue cannot be solved by deciding that full disclosure should be attained because this could damage businesses whose involvement is necessary for the whole system to function.

\textsuperscript{289} It is, in fact, clear that a simple statement about the non-materiality of the issue as justification for non-reporting without further specifications is prone to disguise cherry picking itself.

\textsuperscript{290} Vogel, \textit{supra} note 7, at 2 (distinguishing between strategic and defensive rationales about CSR practices).

B. Which Concept of Sustainability

When the Sustainable Stock Exchanges Initiative was launched in 2009, the then-UN Secretary General depicted it as a way to solve some of the most pressing issues of our time. However, the concept of sustainability that emerges from the disclosure framework is narrower and focuses on business risks for corporations, with the exclusion of information that either do not represent material risks or the disclosure of which could create risks per se. This is all the more evident with the exclusion of human rights violations and tax transparency from the 2018 standards. These considerations make clear that the macro-social concept of sustainability does not forcefully correspond to ESG issues that have a financial relevance for single firms. Consequently, even if disclosure could have the effect to improve performance of corporations on certain issues, it is unlikely that it will operate the massive re-allocation of capital that is needed, for example, to tackle climate change.

More generally, the fundamental problem is that the business case for sustainable practices is per se limited. Outside of the shadow of public regulation, the fundamental contradictions between capitalist accumulation, environmental externalities and downplaying labor and social standards to save on production costs limit the extent to which corporations, as well as investors and stock exchanges, can force a meaningful change, despite the fact that certain more sustainable practices can sometimes be beneficial for profits in the aggregate. Nevertheless, the described disclosure framework can solve these deep coordination problems only superficially. Paradoxically, the effectiveness of the framework largely depends on the force of the threat of public regulations. A more effective threat, in fact, creates business risks for investors and can foster more pervasive reporting or more efforts. In fact, it is clear that if new environmental regulations are passed, or more stringent labor laws are approved some corporations could suffer financial damage.

The institutional architecture that produced the framework is unlikely to broaden the embedded concept of sustainability. From the point of view of the drafting of the framework, the relationship of power between the

292 Ban Ki-Moon, supra note Error! Bookmark not defined.
293 More recurrent environmental disasters produce enormous economic harms. The reduction of labor rights and trade unions hampers growth and future profit prospects.
294 As it has been argued, compliance with a private regulatory framework is enhanced by the risk of public regulation. Tim Büthe, Private Regulation in the Global Economy: A (P)Review, 12 BUS. & POL. 1, 19-20 (2010).
rule issuers and the targets of the rules substantially impede a more 
binding standard. It has been shown that when corporations failed to 
report, along specific metrics, it caused the WFE to change them.  
Single exchanges that mandate ESG factors disclosure do not have incentives to 
implement broader rules because of competitive pressures and the risk of 
losing prospect issuers. Finally, apart from explicitly socially responsible 
one, investors are interested in ESG factors because they affect the 
profitability of specific securities or of the portfolio, and do not forcefully 
care about a more inclusive concept of sustainability.

C. Contesting the Framework?

The analytical lens adopted in this paper allowed us to depict the many 
governance effects of the use of indicators in this specific context. On the 
one side, I have identified an internal power effect, where the target of the 
indicators is meant to be regulated by the indicator itself through investor 
pressure. This effect is undoubtedly present in the SSEI/WFE 
framework. Nevertheless, even from an internal point of view, this 
effect is much more nuanced than it initially appears because of the 
institutional factors at play in the framework. First of all, the supposed 
users of the indicators (investors) have conflicting interests, and their 
interests could be damaged both by compliance and non-compliance. 
Second, the institutional structure requires the buying-in of exchanges and 
on several occasions of corporations themselves. Apart from the pure risk 
of non-compliance, the desire to enroll as many participants as possible 
and the participatory elaboration of the indicators have resulted in the 
selection of the indicators that are preferred by the regulated subjects. 
At a higher theoretical level, this casts doubts on the role of simple targets 
of rules in international regulatory frameworks.

From an external point of view, it has been demonstrated how 
investors’ demands and a narrow definition of sustainability have created 
the possibility of producing the indicator and the fundamental role 
exercised by the SSEI and the WFE in the enrollment of stock exchanges. 
This confirms the importance of transnational financial associations in 
expanding the influence of financial actors in drafting regulations. 
Occupying the regulatory space, as well as the legitimacy claim that the

295 WFE, supra note 13, at 2.
296 See section II.B.
297 As it emerges both from the process of elaboration of the indicators and from the fact that 
factors that were not reported were excluded from the list.
298 McKeen-Edwards & Porter, supra note 162.
sustainable corporation label entails, have a political relevance that transcends the actors involved and implicates the broader society.

In light of the social importance of ESG factors, it could be sensible to require broader participation from civil society actors or more accountability from corporations through adequate global administrative law procedures. Nevertheless, I remain skeptical about the possibility of global administrative law to make corporations and investors more accountable in the context of this specific framework. First of all, this voluntary reporting scheme has been made possible exactly because CSR and SRI have been reframed and curbed to business relevant ESG factors. The historical analysis at the beginning of the paper casts doubts on the possibility to enlarge the factors ex-post. Secondly, the indicators have been drafted in order to make them business relevant and in a way that implicitly assumes a specific ideology about the relationship between business practices and sustainability and about the adequateness of market mechanisms to foster more sustainable practices. If this underlying logic remains unaltered, it is possible to attain incremental improvements, but the potential of the indicators remains somewhat limited.

Finally, this would not solve the issue of the users (and enforcers) of the broader information disclosed. For example, CSR reports have been assessed as meaningless and often NGOs do not even read them; it is therefore difficult to think that just more disclosure would be significant in shifting corporate and investors behavior.

However, even if business-centered, civil society can exert some leverage on the ESG factors disclosure framework described. As it has been argued, two of the main risks that concern investors involve reputation and more stringent regulation. Corporations that show that they are ahead of new regulation should be less risky from this point of view. Therefore, political pressure for more regulation could exert also an indirect effect through the disclosure framework. The creation of a potential risk, even without the formal adoption of any new piece of legislation, albeit limited, is the best way that third parties have to harness this business centric ESG framework to amplify their demands.


300 See section I.C.

301 Brown, de Jong & Levy, supra note 87, at 575.
VI. CONCLUSION

This paper has provided the first analysis of the SSEI-WFE framework for reporting ESG factors at the global level. A compositied analytical framework has been developed to take into account the regulatory force of indicators, the political-economy dynamics of the actors involved in the project and the role of transnational financial associations in expanding the role of financial actors in crafting regulation. The paper has outlined the success of the institutional entrepreneurs in enrolling stock exchanges but has also cast some doubts on the possibility that the indicators as currently drafted can solve the technical problems underlying ESG issues disclosure.

As this paper has demonstrated, the indicators have empowered stock exchanges to occupy the regulatory space and to align the diverging interests of corporations and investors, promoting and spreading a specific concept of sustainability linked to business risks and strategic opportunities. Despite the claim of the prominent role that investors and corporations could play in environmental and social matters, the indicators to assess these improvements are narrowly focused on financially relevant issues, to be determined for every corporation according to the concept of materiality.

Because of the frameworks’ institutional characteristics and historical development, it is difficult to challenge the concept of sustainability embedded in the indicators from within the boundaries of the framework itself, as it is unlikely that even a broader framework can be effectively deployed to foster a different conception of sustainability. However, activists’ campaigns on specific issues can increase the business risk deriving from specific sectors or open up business opportunities. If these campaigns receive attention and gain political salience, even a merely business centered ESG factors disclosure framework could – at least minimally – amplify them. However, this reinforces the idea that a political battle is more promising for enforcing meaningful change rather than hoping that rational investors imbued with information reallocate capital at the speed and to the extent currently needed.
APPENDIX

1. WFE 2015 Indicators

2. WFE 2018 Indicators
<table>
<thead>
<tr>
<th>Category</th>
<th>Metric</th>
<th>Description</th>
<th>Exchange Value Driver</th>
<th>SBI.64</th>
<th>COP</th>
<th>GAS</th>
<th>IBC</th>
<th>UNGC</th>
</tr>
</thead>
<tbody>
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<td>Environmental</td>
<td>Direct &amp; Indirect GHG Emissions</td>
<td>Total amount of GHG emissions (Scope 1 &amp; Scope 2)</td>
<td>Developing well-functioning, more resilient, less volatile markets</td>
<td>E102.1</td>
<td>C11.1</td>
<td>CF7.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<td>Environmental</td>
<td>Carbon Intensity</td>
<td>Total GHG emissions relative to revenue</td>
<td></td>
<td>D08.1</td>
<td>CF7.1</td>
<td>M00.1</td>
<td>NP0.1</td>
<td></td>
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<tr>
<td>Environmental</td>
<td>Energy Intensity</td>
<td>Amount of energy required per unit of output</td>
<td></td>
<td>D08.1</td>
<td>CF7.1</td>
<td>M00.1</td>
<td>NP0.1</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>Water Intensity</td>
<td>Total amount of water consumed, recycled, or reclaimed, (quantity)</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
<td></td>
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<tr>
<td>Environmental</td>
<td>Water Intensity</td>
<td>Portion of direct energy consumption from renewable sources</td>
<td>Developing well-functioning, more resilient, less volatile markets</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<td>Environmental</td>
<td>Environmental footprint</td>
<td>Total amount of water consumed, recycled, or reclaimed, (quantity)</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Environmental</td>
<td>Nutrient Management</td>
<td>Nutrient management</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Environmental</td>
<td>Environmental policy</td>
<td>Does your company publish and follow an E&amp;H policy?</td>
<td>Developing well-functioning, more resilient, less volatile markets</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Environmental</td>
<td>Environmental impact</td>
<td>Off your company have any legal regulatory responsibility for an environmental impact?</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Social</td>
<td>Total Key Metrics</td>
<td>Total Key Metrics</td>
<td>Helping companies navigate current or forthcoming disclosure regulations</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Social</td>
<td>Gender Pay Ratio</td>
<td>Percentage of male and female workforce</td>
<td>Creating more attractive markets for engaged investors</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Social</td>
<td>Employee Turnover Rate</td>
<td>Percentage of active employees</td>
<td>Creating more attractive markets for engaged investors</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
<td></td>
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<tr>
<td>Social</td>
<td>Disability</td>
<td>Percentage of FT, contract, and fixed-term employees with disabilities</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Social</td>
<td>Temporary Workforce Rate</td>
<td>Percentage of FT, contract, and fixed-term employees</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<td>Social</td>
<td>Remuneration</td>
<td>Does your company publish and follow a non-discrimination policy?</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Social</td>
<td>Health &amp; Safety</td>
<td>Does your company publish and follow a safety policy?</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Social</td>
<td>Child &amp; Forced Labor</td>
<td>Does your company prohibit the use of child or forced labor throughout the supply chain?</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Social</td>
<td>Human Rights Policy</td>
<td>Does your company publish and follow a human rights policy or statement?</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<td>Social</td>
<td>Human Rights Violations</td>
<td>Number of criminal or human rights violations filed, addressed, resolved</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Governance</td>
<td>Board Composition</td>
<td>Percentage of board members (executive &amp; non-executive)</td>
<td>Contributing to national and international sustainable development goals</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
<td>NP0.1</td>
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<tr>
<td>Governance</td>
<td>Board Composition</td>
<td>Does your company have a stock exchange listing or similar?</td>
<td>Helping companies navigate current or forthcoming disclosure regulations</td>
<td>E10.3</td>
<td>D09.1</td>
<td>M00.1</td>
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<td>Board Composition</td>
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<td>Governance</td>
<td>Board Composition</td>
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<td>Governance</td>
<td>Board Composition</td>
<td>Does your company have a stock exchange listing or similar?</td>
<td>Helping companies navigate current or forthcoming disclosure regulations</td>
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<td>Governance</td>
<td>Board Composition</td>
<td>Does your company have a stock exchange listing or similar?</td>
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<td>Governance</td>
<td>Board Composition</td>
<td>Does your company have a stock exchange listing or similar?</td>
<td>Helping companies navigate current or forthcoming disclosure regulations</td>
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<td>Governance</td>
<td>Board Composition</td>
<td>Does your company have a stock exchange listing or similar?</td>
<td>Helping companies navigate current or forthcoming disclosure regulations</td>
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<td>Governance</td>
<td>Board Composition</td>
<td>Does your company have a stock exchange listing or similar?</td>
<td>Helping companies navigate current or forthcoming disclosure regulations</td>
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<td>Governance</td>
<td>Board Composition</td>
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<td>Governance</td>
<td>Board Composition</td>
<td>Does your company have a stock exchange listing or similar?</td>
<td>Helping companies navigate current or forthcoming disclosure regulations</td>
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<td>Governance</td>
<td>Board Composition</td>
<td>Does your company have a stock exchange listing or similar?</td>
<td>Helping companies navigate current or forthcoming disclosure regulations</td>
<td>E10.3</td>
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<tr>
<td>ID</td>
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<td>Guidance</td>
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<tr>
<td>E1</td>
<td>Environmental</td>
<td>GHG Emissions</td>
<td>(E1.1) Total amount, in CO2 equivalents, for Scope 1 (if applicable)</td>
<td>Please use the WRI/WBCSD GHG protocol.</td>
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<td>(E1.2) Total amount, in CO2 equivalents, for Scope 2 (if applicable)</td>
<td>Please use the WRI/WBCSD GHG protocol.</td>
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<td>(E1.3) Total amount, in CO2 equivalents, for Scope 3 (if applicable)</td>
<td>Please use the WRI/WBCSD GHG protocol.</td>
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<tr>
<td>E2</td>
<td>Environmental</td>
<td>Emissions Intensity</td>
<td>(E2.1) Total GHG emissions per output scaling factor</td>
<td>Scaled factors set by reporting company. Examples include: revenues, sales, production units.</td>
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<td></td>
<td>(E2.2) Total non-GHG emissions per output scaling factor</td>
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<tr>
<td>E3</td>
<td>Environmental</td>
<td>Energy Usage</td>
<td>(E3.1) Total amount of energy directly consumed</td>
<td>Reported in MWh or GJ.</td>
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<td>(E3.2) Total amount of energy indirectly consumed</td>
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<tr>
<td>E4</td>
<td>Environmental</td>
<td>Energy Intensity</td>
<td>Total direct energy usage per output scaling factor</td>
<td>Scaled factors set by reporting company. Examples include: physical space, FTEs, revenues.</td>
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<tr>
<td>E5</td>
<td>Environmental</td>
<td>Energy Mix</td>
<td>Percentage: Energy usage by generation type</td>
<td>Examples include: renewables, hydro, coal, oil, natural gas.</td>
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<tr>
<td>E6</td>
<td>Environmental</td>
<td>Water Usage</td>
<td>(E6.1) Total amount of water consumed</td>
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<td></td>
<td></td>
<td></td>
<td>(E6.2) Total amount of water reclaimed</td>
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<tr>
<td>E7</td>
<td>Environmental</td>
<td>Environmental Operations</td>
<td>(E7.1) Does your company follow a formal Environmental Policy? Yes/No</td>
<td>Cite public content, if available.</td>
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<td>(E7.2) Does your company follow specific waste, water, energy, and/or recycling policies? Yes/No</td>
<td>Use total compensation, including all bonus and incentives. For example: Dodd-Frank regulations (US)</td>
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<td>(E7.3) Does your company use a recognized energy management system? Yes/No</td>
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<tr>
<td>E8</td>
<td>Environmental</td>
<td>Environmental Oversight</td>
<td>Does your Board/Management Team oversee and/or manage climate-related risk? Yes/No</td>
<td>Cite public content, if available.</td>
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<tr>
<td>E9</td>
<td>Environmental</td>
<td>Environmental Oversight</td>
<td>Does your Board/Management Team oversee and/or manage other sustainability issues? Yes/No</td>
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<tr>
<td>E10</td>
<td>Environmental</td>
<td>Climate Risk Mitigation</td>
<td>Total amount invested, annually, in climate-related infrastructure, resilience, and product development?</td>
<td>Reported in USD, if possible.</td>
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<tr>
<td>S1</td>
<td>Social</td>
<td>CEO Pay Ratio</td>
<td>(S1.1) Ratio: CEO total compensation to median FTE total compensation</td>
<td>Cite public content, if available.</td>
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<td>(S1.2) Does your company report this metric in regulatory filings? Yes/No</td>
<td>Use total compensation, including all bonus and incentives. For example: Dodd-Frank regulations (US)</td>
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<tr>
<td>S2</td>
<td>Social</td>
<td>Gender Pay Ratio</td>
<td>Ratio: Median male compensation to median female compensation</td>
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<td>Use total compensation, including all bonus and incentives.</td>
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<tr>
<td>S3</td>
<td>Social</td>
<td>Employee Turnover</td>
<td>(S3.1) Percentage: Year-over-year change for full-time employees</td>
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<td>(S3.2) Percentage: Year-over-year change for part-time employees</td>
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<td></td>
<td>(S3.3) Percentage: Year-over-year change for contractors and/or consultants</td>
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<tr>
<td>S4</td>
<td>Social</td>
<td>Gender Diversity</td>
<td>(S4.1) Percentage: Total enterprise headcount held by men and women</td>
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<td>(S4.2) Percentage: Entry- and mid-level positions held by men and women</td>
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<td></td>
<td>(S4.3) Percentage: Senior- and executive-level positions held by men and women</td>
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<tr>
<td>S5</td>
<td>Social</td>
<td>Temporary Worker Ratio</td>
<td>(S5.1) Percentage: Total enterprise headcount held by contractors and/or consultants</td>
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<tr>
<td>S6</td>
<td>Social</td>
<td>Non-Discrimination</td>
<td>Does your company follow a sexual harassment and/or non-discrimination policy? Yes/No</td>
<td>Cite public content, if available.</td>
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<tr>
<td>S7</td>
<td>Social</td>
<td>Injury Rate</td>
<td>Percentage: Frequency of injury events relative to total workforce size</td>
<td>Reference ILO &amp; UNDHR standards, if possible.</td>
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<tr>
<td>S8</td>
<td>Social</td>
<td>Global Health &amp; Safety</td>
<td>Does your company follow an occupational health and/or global health &amp; safety policies? Yes/No</td>
<td>Cite public content, if available.</td>
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<tr>
<td>S9</td>
<td>Social</td>
<td>Child &amp; Family Labor</td>
<td>(S9.1) Does your company follow child and/or family labor policy? Yes/No</td>
<td>Cite public content, if available. Reference ILO &amp; UNDHR standards, if possible.</td>
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<td></td>
<td>(S9.2) If yes, does your child and/or family labor policy also cover suppliers and vendors? Yes/No</td>
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<tr>
<td>S10</td>
<td>Social</td>
<td>Human Rights</td>
<td>(S10.1) Does your company follow a human rights policy? Yes/No</td>
<td>Cite public content, if available. Reference ILO &amp; UNDHR standards, if possible.</td>
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<td>(S10.2) If yes, does your human rights policy also cover suppliers and vendors? Yes/No</td>
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<tr>
<td>Governance</td>
<td>Board Diversity</td>
<td>G1.1) Percentage: Total board seats occupied by men and women</td>
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<td>Governance</td>
<td>Board Independence</td>
<td>G2.1) Does company prohibit CEO from serving as board chair? Yes/No</td>
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<tr>
<td>Governance</td>
<td>Board Independence</td>
<td>G2.2) Percentage: Total board seats occupied by independent(s)</td>
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<tr>
<td>Governance</td>
<td>Committee Chairs Occupied</td>
<td>G1.2) Percentage: Committee chairs occupied by men and women</td>
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<tr>
<td>Governance</td>
<td>Governance Code of Conduct</td>
<td>G3.1) Are your vendors or suppliers required to follow a Code of Conduct? Yes/No</td>
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<tr>
<td>Governance</td>
<td>Governance Code of Conduct</td>
<td>G3.2) If yes, what percentage of your suppliers have formally certified their compliance with the code?</td>
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<td>Governance</td>
<td>Ethics &amp; Anti-Corruption</td>
<td>G5.1) Are your vendors or suppliers required to follow a Code of Conduct? Yes/No</td>
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<tr>
<td>Governance</td>
<td>Ethics &amp; Anti-Corruption</td>
<td>G5.2) If yes, what percentage of your workforce has formally certified compliance with the policy?</td>
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<td>Governance</td>
<td>Data Privacy</td>
<td>G7.1) Does your company follow a Data Privacy policy? Yes/No</td>
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<tr>
<td>Governance</td>
<td>Data Privacy</td>
<td>G7.2) Has your company taken steps to comply with GDPR rules? Yes/No</td>
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<td>Governance</td>
<td>Sustainability Reporting</td>
<td>G8.1) Does your company publish a sustainability report? Yes/No</td>
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<td>Governance</td>
<td>Sustainability Reporting</td>
<td>G8.2) Is sustainability data included in your regulatory filing? Yes/No</td>
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<tr>
<td>Governance</td>
<td>Disclosure Practices</td>
<td>G9.1) Does your company provide sustainability data to sustainability reporting frameworks? Yes/No</td>
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<tr>
<td>Governance</td>
<td>Disclosure Practices</td>
<td>G9.2) Does your company focus on specific UN Sustainable Development Goals (SDGs)? Yes/No</td>
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<tr>
<td>Governance</td>
<td>Disclosure Practices</td>
<td>G9.3) Does your company set targets and report progress on the UN SDGs? Yes/No</td>
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<tr>
<td>Governance</td>
<td>External Assurance</td>
<td>G10.1) Does your sustainability disclosures meet rigorous sustainability standards? Yes/No</td>
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</table>

**Source:** WFE 2018 ESG Revised Metrics

**2020 KNOWLEDGE AND POWER**

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