THE DIGITAL ECONOMIST

Healing A Broken World

Corporate ESG Needs a Jolt to Its System

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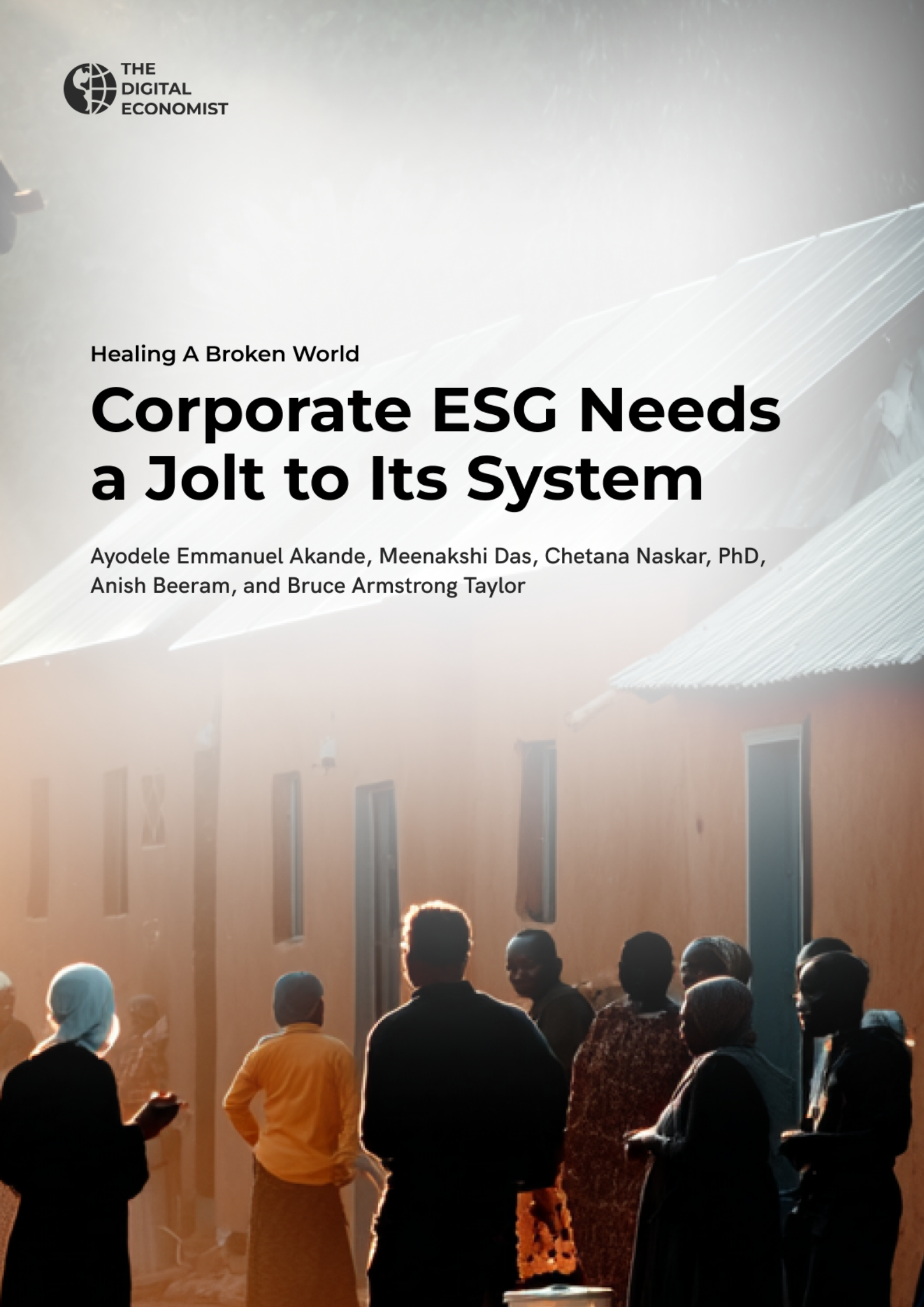

What began as a way to meet new corporate policies, provide investor guidance, and report regulatory compliance now requires CPR.

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1. Introduction[1]

1.1 A Brief Informal Backgrounder

One of the profound benefits of the accelerating transformation to a true global Industry 5.0 digital economy is that initiatives that, in the past, would have been understood to be too costly to meet corporate financial performance requirements or too management- and workforce-intensive, may now not be so. One such area is within the realm of *Environmental, Social, and Governance (ESG)*, which itself has its roots in earlier concepts, such as Corporate Social Responsibility (CSR) and Socially Responsible Investing (SRI), which emphasized ethical investment and corporate accountability.

These frameworks laid the foundation for modern ESG principles by promoting sustainability and socially responsible business practices. ESG gained mainstream recognition in 2004 when the United Nations Global Compact (UNGC) published the report "Who Cares Wins," which formalized ESG as a key consideration for investors and businesses.

Despite its progress, many mainstream ESG frameworks—such as Bloomberg, Refinitiv, MSCI, GRI, and SASB—often overlook critical aspects of human-centric development. These models tend to focus on financial and environmental metrics while neglecting broader issues of social equity, inclusion, and energy justice.

To address these gaps, the Sustainable Human Empowerment (SHE) framework integrates human empowerment, inclusion, and social equity into the ESG paradigm. By prioritizing these elements, SHE ensures a more holistic approach to sustainable development, aligning financial success with ethical responsibility.

In the two decades since its introduction, ESG has seen widespread adoption, with more than 88 percent of all publicly traded corporations implementing formal ESG policies and programs, according to Key ESG's 2024 "50 Key Statistics You Need to Know"[2] report. Among major companies, 90 percent of the Fortune Global 500 use the Global Reporting Initiative (GRI),[3] an Amsterdam-based NGO, as a primary international framework for reporting ESG.

However, more recently, regulatory frameworks, particularly in the European Union,[4] have implemented more stringent ESG compliance measures than in the United States. For instance, the European Corporate Sustainability Reporting Directive (CSRD) requires both broader and more verifiable disclosures while US regulations reporting requirements are more fragmented and voluntary, thus less regulatory in nature and more investor- and board of directors-oriented governance guidance in nature.

In its original conception, ESG was principally intended, in the US, to provide a level of advisory understanding to investors, stockholders, the public—through the annual report—as well as oversight by government regulators. Within its

[1] United Nations Environment Programme Finance Initiative, "Who Cares Wins," retrieved September 18, 2024, https://www.unepfi.org/fileadmin/events/2004/stocks/who_cares_wins_global_compact_2004.pdf.

[2] Hopkinson, I, "2024 ESG Statistics: Insights for Business Leaders," KEY ESG, retrieved September 17, 2024, https://www.keyesg.com/article/50-esg-statistics-you-need-to-know-in-2024.

[3] Global Reporting Initiative, "The Global Leader for Impact Reporting," retrieved September 17, 2024, https://www.globalreporting.org/.

[4] OneTrust, "Ultimate Guide to the EU CSRD ESG Regulation for Businesses," retrieved September 17, 2024, https://www.onetrust.com/blog/ultimate-guide-to-eu-csrd-esg-regulation-for-businesses/.

three principal domains (and many sub-domains). The purpose was both requirement and encouragement, bringing some measure of accountability and transparency to the relative effort or effectiveness of policies, programs, and regulation adherence.

ESG regulatory compliance means adhering to globally accepted and standardized regulatory frameworks or national and international regulations applicable to a company's structure, industry, and country of operations. However, at least in the US, ESG is generally immune from audit requirements for corporate performance. Such regulations being principally focused on matters of financial performance accountability for publicly-traded, investor-owned companies.
Globally (and increasingly so in the US, as well, ESG has become a crucial factor in investment guidance and corporate governance policy.
It increasingly influences risk assessment, stakeholder engagement, and long-term performance. The US, as in many other economic markets, is increasingly incorporating ESG metrics into financial analysis. Regulatory approaches, however, vary widely across regions and national economy markets.

1.2 So, What's Wrong?

While some argue the ESG remains an effective corporate governance tool, this chapter examines critical shortcomings that may hinder its impact and implementation. Despite its intended role in driving accountability, some critics argue that ESG has increasingly become a bureaucratic exercise focused on compliance and "looking good" rather than meaningful impact.

Research suggests that without measurable, verifiable enforcement mechanisms, ESG may fail to translate corporate policy and governance commitments into tangible environmental and social progress. ESG initiatives are often disconnected from the on-the-ground realities of the people, communities, countries, and regions where they are implemented, particularly so by large, publicly traded multinational corporations (MNCs).

This misalignment results in gaps between corporate ESG commitments and their actual social and environmental impact.

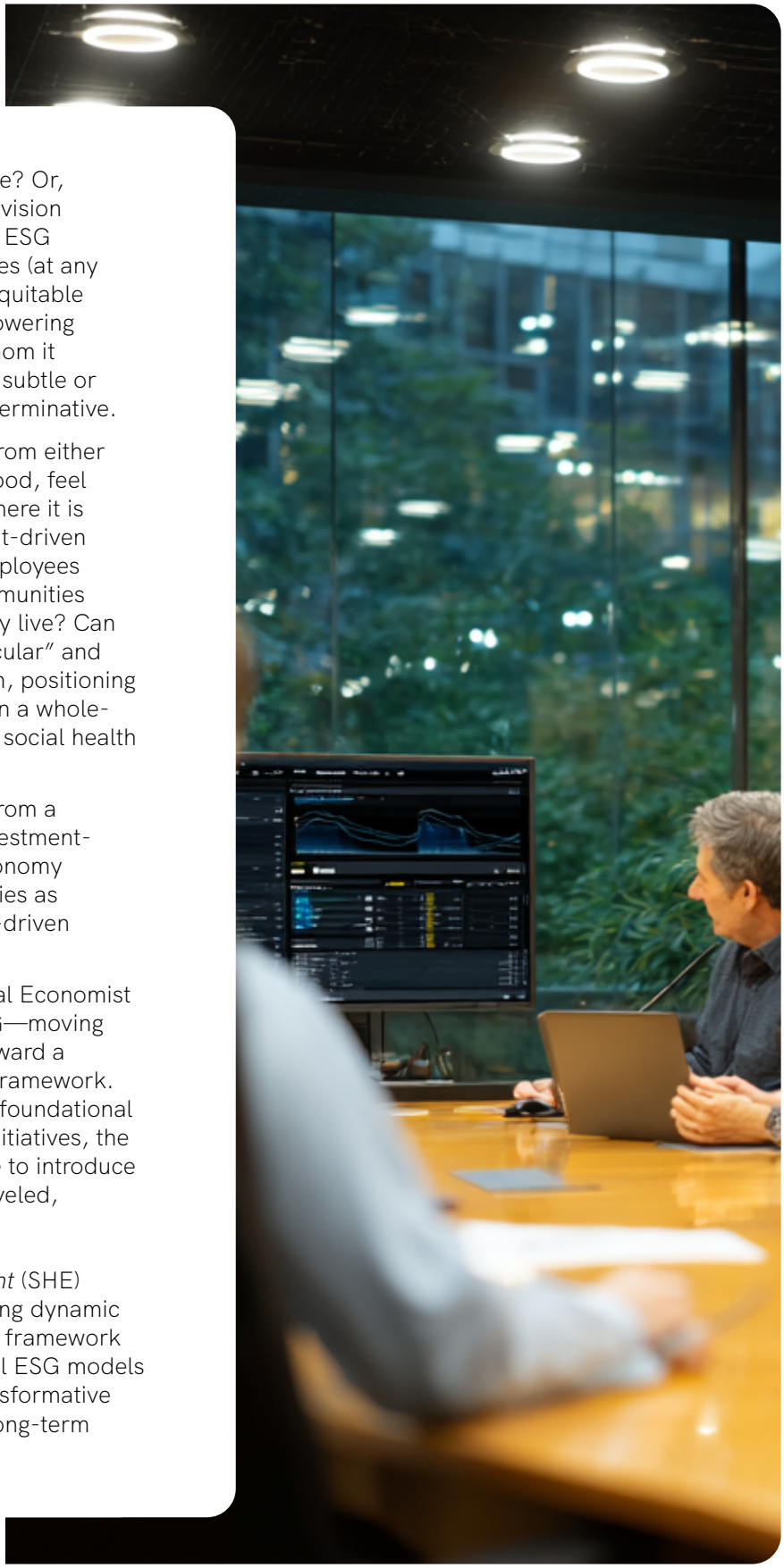
One key issue lies in both employee engagement within the corporate organization, as well as externally within the communities in which the companies operate.

- How actively do employees at all levels participate in ESG initiatives, and to what extent do organizations integrate ESG into their operational culture?
- How personally and professionally engaged and involved is a company's workforce with the programs intended to address pressing ESG issues in the communities and countries where the company operates?
- Are employees at all levels actively engaged in the company's ESG initiatives? Do they feel included and empowered to contribute meaningfully to sustainability programs? Are employees welcome, encouraged, and supported to take active participation as a key part of their work charter and compensation?
- Do the corporate chairperson and/or CEO see this as a foundational expression of corporate values to be communicated to all stakeholders in the corporate annual report?
- Further, do corporate ESG policies reflect a shared commitment to diversity, equity, and inclusion (DEI) (now deeply out of favor in the US' current political atmosphere and the current publicly elected presidential administration) in its global ESG-facing programs? Is it truly engaged in its projects and activates critical environmental issues in communities at any scale in which it has a finance and operations stake?
- Philosophically, which is it? Do large multinational corporations (MNCs) see themselves as "donating" a tiny sliver of their financial largesse to the subject social

communities in which they operate? Or, conversely, do they have a larger vision of being in a long-term sustaining ESG partnership with these communities (at any scale), or does it see itself in an equitable wealth-sharing partnership, empowering people and communities upon whom it depends? The distinction may be subtle or nuanced, but also pivotal and determinative.

- Finally, can ESG funding evolve from either regulatory compliance or "look good, feel good" annual reporting, to one where it is understood that it is an investment-driven partnership—first, in and with employees and, second, in and with the communities where they and their families likely live? Can they be seen in an expanded "circular" and "regenerative" economy approach, positioning the MNC as a long-term partner in a whole-community-driven ecological and social health and well-being initiatives?
- Finally, can ESG funding evolve from a compliance requirement to an investment-driven partnership? A circular economy approach would position companies as long-term partners in community-driven sustainability initiatives.
- In this broader context, The Digital Economist presents a paradigm shift for ESG—moving beyond regulatory compliance toward a people-centered, impact-driven framework. While ESG may have served as a foundational model for various sustainability initiatives, the authors argue that now is the time to introduce a renewed and significantly up-leveled, purpose-driven approach.

The *Sustainable Human Empowerment* (SHE) framework redefines ESG by integrating dynamic social and environmental values. This framework addresses the limitations of traditional ESG models by fostering a more adaptive and transformative approach to sustainability, ensuring long-term impact beyond compliance.



2. The SHE Framework: Designing Next-Gen ESG

The Digital Economist now introduces the Sustainable Human Empowerment (SHE) framework as this design up-leveling of ESG. Within it, its authors argue for integrating human empowerment, inclusion, and social equity into the ESG paradigm. By prioritizing these elements, SHE ESG ensures a more holistic approach to sustainable development, aligning financial success with ethical, environmental, and social well-being. And it will very likely be made far more possible with the introduction of advanced digital tools previously unavailable.

SHE signifies a fundamental transformation in ESG practices. Unlike traditional, top-down corporate policies, this framework prioritizes a people-centered approach, ensuring that ESG is not merely a compliance-driven policy function but an active mechanism for inclusivity and empowerment. This framework redefines ESG by integrating democratic participation, fostering a dynamic, human-focused approach to sustainability, and embedding social equity into corporate governance structures.

All this is made possible because of 5.0-level digitalization (e.g., AI–enabled sensing, monitoring, data analytics at the edge [closest to people and in communities], Web3 and blockchain distribution and decentralization, tokenization, 5G/6G mobile and wireless apps, modern digital and internet infrastructure, AR/VR, digital twinning, and XR meda—immersive, interactive, experiential).

Still, to properly begin this discussion, there's no stepping around or over the readily apparent *double entendre*. The SHE ESG Framework also focuses on gender equity. Despite its female connotation, it really is gender-equity-centric.

Human-centricity and empowerment appear to be a gaping hole in today's corporate ESG fabric. SHE has the authentic intention of transforming ESG by giving it a fresh refocus for the traditional three realms, as both a matter of clearly distinguished policy direction and the revitalization of an emergent practice of diverse, equitable, and inclusive (DEI) engagement (again, we hasten to remind the reader that in the US, DEI is forcefully being discouraged), resulting in the empowerment of the very people whose lives, communities, and environments are affected (or not!) by corporate ESG initiatives.

The digital 5.0 SHE ESG framework is designed to seek true social, environmental, and governance that integrates people with disabilities and/or other forms of disempowerment through a distinctly people-first approach. It serves as a flexible model, allowing organizations to develop sustainability and social-empowerment strategies using both robust design thinking and systems thinking approaches.

2.1 Existing ESG Frameworks Overview

Although existing ESG frameworks aim to enhance comparability and transparency by addressing governance, social, and environmental issues, they differ significantly in scope, materiality definition, and intended audience.

- **Global Reporting Initiative (GRI)** focuses on a broad range of stakeholders with an emphasis on impact materiality. It provides a comprehensive framework for sustainability reporting, which is widely accepted for its extensive coverage. However, implementation can be resource-intensive.

- **Sustainability Accounting Standards Board (SASB)** is primarily investor-focused, emphasizing financial materiality and includes industry-specific disclosures across seventy-seven sectors. While it enhances standardization and comparability, it may overlook broader sustainability concerns. Additionally, its reliance on company-reported data can introduce inconsistencies.

- **Morgan Stanley Capital International (MSCI)** uses an industry-specific methodology to evaluate ESG risk exposure and management. It's widely used by investors but criticized for its complex and opaque assessment process.
- **Sustainalytics** specializes in ESG risk assessment, providing forward-looking insights on trends in key ESG concerns. Its approach is particularly relevant for investors seeking to anticipate emerging risks in sustainability.

Key differences among the frameworks include their relative scope (comprehensive *vs.* focused, materiality definition (financial *vs.* impact), industry specificity, primary users (wide stakeholder base *vs.* tightly investor-guidance-focused), and data sourcing methodologies. GRI and SASB provide reporting frameworks while the others collect and analyze data to produce ratings or scores. These variations reflect the complexity of ESG assessment and the challenge of standardization and comparability in the field.

Organizations often use multiple frameworks to gain sharper insights into actual ESG performance and to more comprehensively meet diverse stakeholder needs. The choice of framework depends on an organization's specific requirements, target audience, and available resources, highlighting the need for careful consideration in selecting the most appropriate ESG reporting approach. As the field evolves, there is a growing need for harmonization among these frameworks to reduce reporting burden and improve comparability while still maintaining the unique strengths each framework brings to ESG assessment and reporting.

Structural analysis of ESG taxonomies indicates both similarities and differences in the way they categorize ESG components, especially in the social domain. All frameworks consistently address greenhouse gas emissions, resource use, and pollution in the environmental category. However, MSCI and GRI place a stronger emphasis on climate change as a standalone corporate risk

Framework	Environmental Focus	Social Focus	Governance Focus
MSCI	Strong focus on climate change	Incorporates "social opportunities" (e.g., access to finance, health care)	Covers corporate behavior
GRI	Addresses climate change and broad environmental issues	Human rights, local communities, and stakeholder engagement	Standard governance principles
SASB	Highlights air quality and ecological impacts	Industry-specific concerns (customer welfare, product labeling)	Systemic risk management, legal and regulatory focus
Bloomberg	General environmental categories	Supply chain considerations	Shareholder rights, takeover defense
Refinitiv	Standard environmental factors	Workforce and product responsibility	Traditional governance metrics

factor. SASB uniquely highlights air quality and ecological impacts, demonstrating its industry-specific focus.

The reporting burden only increases as these frameworks expand, making it difficult for companies to keep up with new policies. The growing strategies of ESG also tend to make comparability between companies and regions more difficult.

At the same time, the growing differences between frameworks reduce comparability across regions and industries. SHE will respond by creating a more unified and practical reporting structure. The structure will help organizations collect, track, and report ESG data more efficiently while adapting to changes in policy and market expectations. By blending human welfare and empowerment together with the strongest elements of each framework, it will support faster action and clearer progress on shared ESG goals.

2.2 Challanges in Implementing SHE ESG

Inconsistencies among ESG frameworks can deter stakeholders, erode trust, and damage cooperation among companies. Such dissonance often results in inefficiencies, as resources may be misallocated or efforts duplicated, leading to increased costs and missed opportunities for synergies.

Moreover, the lack of a unified approach can create internal conflicts, reduce employee morale, and hinder the collective ability to respond effectively to emerging ESG risks and opportunities. Ultimately, disjointed ESG strategies can impede progress toward long-term sustainability goals and diminish the potential benefits of a comprehensive and cohesive approach.

SHE introduces a more holistic and human-centered approach to ESG, emphasizing human empowerment, inclusion, energy justice, and social equity. While traditional frameworks like Bloomberg, Refinitiv, MSCI, GRI, and SASB cover broad environmental, social, and governance factors, SHE addresses critical aspects that are often underrepresented in existing taxonomies.

Bloomberg and Refinitiv, while being comprehensive, lack explicit focus on such values as energy equity and democracy or disability inclusion. MSCI touches on social opportunities but doesn't deeply address energy justice or poverty alleviation.

GRI, the most comprehensive of the traditional frameworks, covers some aspects of human rights and community relations but doesn't specifically emphasize energy democracy or disability inclusion.

SASB, with its industry-specific approach, touches on some aspects of social impact but lacks the broad emphasis on human empowerment central to SHE ESG.

Overall, SHE distinguishes itself by placing human welfare and empowerment at the core of sustainability analysis, assessment, and reporting. It uniquely incorporates concepts like energy democracy (Shayan et al. 2022) and explicitly addresses poverty and unemployment (Zhao et al. 2022), which are often only implicitly covered in other frameworks. As the SHE framework and models are designed, they will encompass new approaches to addressing GHG Protocol Scopes 1, 2, and 3, and the resulting GHG avoidance, reduction, capture, reuse, and permanent sequestration, and the corporate users' recommended best approaches. While existing taxonomies may provide valuable metrics for assessing corporate sustainability toward such targets as GHG neutrality through external offsetting credit exchanges, internal net-zero emissions, and circular-economy strategies and beyond. SHE, as built out, will offer a more nuanced, targeted approach to evaluating a company's contribution to human-centered and -empowered sustainable development and operations, filling critical gaps in current ESG assessments.

2.3 Addressing Diversity Through SHE

The SHE framework examines diversity on four levels. First, it measures diversity at a level of abilities. Historically, people with disabilities have been excluded from ESG policies and workspaces. SHE metrics aim to increase accessibility for people by assessing abilities, rather than disabilities, by ensuring accessibility technologies, such as requiring websites to meet Web Content Accessibility Guidelines[5] (WCAG) standards and providing workspaces for people with different abilities.

Second, SHE focuses on gender equity as a crucial dimension of diversity. The framework promotes balanced representation in leadership roles, setting specific metrics for ensuring gender diversity in management and board positions. Additionally, SHE emphasizes gender-inclusive policies throughout organizational structures, from hiring practices to ensuring women's full participation in decision-making processes, particularly in energy and community development projects.

Third, SHE studies diversity on the level of personal identity and the intersections between them. Intersectionality is crucial, as not only does workspace and ESG discrimination happen because of ability but also because of countless other determinants, whether that be gender identity, socio-economic status, or ethnicity. SHE Framework will provide clear, all-stakeholder-oriented metrics for examining the diversity of ESG strategies.

Fourth, SHE explores collective, community diversity. Low- or middle-income countries (LMICs) have been systematically excluded from ESG frameworks. The SHE Framework seeks to include these countries more fully in global sustainability and equity efforts. Initiatives for climate action also offer a chance to forward important social objectives such as gender equity, diversity, and inclusion for all people with differing abilities to add technical skills and business value.

SHE can help connect environmental initiatives with economic and social growth, offering transformative strategies addressing such pressing issues as poverty, inequality, and energy access equity, while fostering a more inclusive and diverse global economy.

Integrating "ability diversity (eschewing the term ability) with ESG frameworks, from the perspective of human empowerment, offers a transformative approach to sustainable business practices and processes that address environmental and climate-change necessities while tackling critical social issues such as poverty, inequality, and energy accessibility.

Diversity in ESG approaches guarantees fair(er) representation of gender, race, and class; fosters cultural sensitivity in sustainability initiatives; and improves problem-solving skills and accessibility equity for all. It encourages both deeper and more creative opportunities for understanding the complexity of interrelationships between global environmental challenges by bringing a greater range of perspectives to the table. ESG programs become more inclusive, both socially and culturally sensitive, and, ultimately, more successful in meeting the requirements of all stakeholders when different perspectives are formally included. Prioritizing diversity in ESG frameworks fosters greater stakeholder engagement, organizational creativity, resilience, and adaptability–simultaneously.

A diverse workforce is crucial for achieving inclusivity policies and social/cultural responsibility at the stakeholder level. Diversity has a significant economic impact: adding only 1 percent more of those who are differently abled workers to the American labor force, for instance, could enhance GDP by $25 billion.[6] Increasing the participation rate of women in the labor force over a ten-year period could increase global market capitalization by $5.87 trillion.[7] Such statistics as these underscore the next frontier of mission-driven ESG investing.

[5] W3C. "WCAG 2 Overview." https://www.w3.org/WAI/standards-guidelines/wcag/.

[6] Accenture et al. "Getting To Equal: The Disability Inclusion Advantage," Accenture, October 29, 2018, last retrieved September 16, 2024, chrome-extension://efaid-nbmnnnibpcajpcglclefindmkaj/https://www.accenture.com/content/dam/accenture/final/a-com-migration/pdf/pdf-89/accenture-disability-inclusion-research-report.pdf.

[7] S&P, "How Gender Fits into ESG?" S&P, 2020, last retrieved September 16, 2024, spglobal.com.

In addition to bolstering individual diversity, collective and community diversity is essential to the "first principle of the SHE ESG Framework. Historical exclusion of LMICs from ESG initiatives emphasizes the need for a more equitable approach. Many developing countries struggle to transition to sustainable systems due to industrialization, resource dependency, and unsustainable agricultural practices. Rich countries are often at the forefront of sustainability technologies, while frontier, emerging and developing nation market economies lack both the infrastructure and capital needed for rapid adaptation. Bridging this disparity in a way that prevents neocolonial tendencies and strengthens national sovereignty is vital to increasing the effectiveness and fairness of ESG programs across the board.

The intersection of diversity in ESG produces a strong foundation for enhancing local and regional environments, biodiversity, and social justice and equity. When initiatives are designed with input from diverse communities, climate mitigation efforts can yield tangible social benefits such as improved clean energy access, job creation, equitable representation, and poverty reduction.

2.4 Integrating Gender and Diversity Equity Across the Sustainability Spectrum

The SHE ESG Framework significantly amplifies and accelerates gender and all other forms of diversity and inclusion by extending beyond the traditional ESG to focus on diverse representation in strategic decision-making, leadership, and tactical management roles. While existing ESG frameworks may address board-level diversity, the SHE Framework design approach is both real-time data-centered and action-oriented and inclusive of all levels. It weaves gender equity into the fabric of corporate ESG and climate sustainability efforts, addressing often-overlooked areas which have a profound impact on women's lives.

SHE also emphasizes social justice along every link of both supply and value chains—from suppliers through corporate institutions to end-use customers in both products and services—and promotes fair labor practices that benefit women and diverse workers, who are often the most vulnerable (or absent) in global value chains. Its innovative poverty-alleviation initiatives create targeted economic opportunities for women in underserved communities, recognizing their pivotal role in sustainable, circular development.

Notably, the SHE Framework's focus on clean energy access, equity, and democracy empowers women to have a greater voice in the primacy of clean energy-related development and distribution projects, addressing a critical gender disparity in a sector traditionally dominated by male decision-makers. SHE pioneers gender-responsive energy planning, ensuring women's needs have a central part in shaping equitable transmission and infrastructure development. This, again, from an advanced 5.0 digital economy perspective, is the province of AI-enabled Web3 distributed-ledger blockchain-based democratic distribution, inclusive of tokenization.

SHE's approach to energy democratization and equity also considers the unique challenges faced by women with special abilities and other diverse minority groups, highlighting the role that this form of intersectionality plays in inequality. By linking clean energy projects with women's health and wellness initiatives, particularly in reducing indoor air pollution, SHE creates a holistic approach that improves women's well-being, within the internal corporate community as well as within the external stakeholder community.

Gender inequity is exacerbated by energy insecurity, and the United Nations Development Programme offers[8] staggering evidence of this.

The SHE design approach not only tackles gender inequality at its roots but also harnesses women's perspectives to drive more inclusively effective eco- and social-sustainability solutions. By incorporating gender, disability, and diversity inclusion into consideration in every aspect of the SHE Framework, such human-empowerment transforms equitable, inclusive diversity (DEI) from an isolated metric into a fundamental driver of

[8] "Energy and Gender Equality," UNDP, accessed September 18, 2024, last retrieved September 16, 2024, https://www.undp.org/energy/our-work-areas/energy-and-gender-equality.

corporate sustainability and holistic circularity that will prove a remarkable social progress advance–one which will accrue considerable new "intangible asset and brand value to the investor-owned corporate institution.

In energy-scarce frontier and emerging economy regions, the burden of energy acquisition falls predominantly on women, as they can spend up to eighteen hours per week collecting fuel for cooking and heating. Despite bearing such a burden of responsibility for such energy impoverishment, women have been too often siloed away from deliberations on energy development policy—discussions for which their voices likely ought to be the most sought. The UNDP further reports[9] that "across 72 countries…women represent only six percent of ministerial-level [or agency-head] positions responsible for national energy policies and programs." US, EU, and ASEAN MNCs have a unique role within the scope of their ESG policies and practices to take an active change role in this, as will be described in the SHE Framework.

Put simply, women often bear significant personal burdens of climate-change-driven insecurity, yet have the least inclusion in policy considerations and decisions. The SHE Framework amplifies and accelerates gender and all forms of equitable inclusion, elevating it to the level of a mandate of the clean, sustainable energy transition.

The impetus for clean energy security extends to some, all, or more of the following, depending upon the scoping of the objectives of clean energy, climate change resilience and adaptation initiatives, projects, and long-range development programs, including (but not limited to):

- democratization of education and skills training for women;
- political enfranchisement in matters of clean energy, overall climate-change resilience and adaptation policy, and workforce inclusion to
    - strengthen and diversify household income streams;
    - equitably democratize climate-change governance inclusion for sustainable, the circular-economy "doughnut-economy" communities;
    - supplier diversification for clean energy and power generation and smart/micro-grid distribution to ensure maximal grid systems uptime availability, protecting against blackout and brownout disruption;
    - sustainable physical and digital infrastructure upgrading or new development.

By bridging clean energy with public health initiatives—reducing household resource use and toxic pollution, for instance—the SHE Framework places the well-being of women at the center of its mission. In doing so, it reinforces the view that equitable gender participation is not merely a social justice concern but a practical and necessary driver of sustainable development.

[9] "Energy and Gender Equality," UNDP, 2024.

2.5 Making the Case for All-Abilities Inclusion in SHE Framework

In May 2019, investors representing more than one trillion US dollars in combined assets, led by New York State Comptroller Thomas P. DiNapoli and Oregon State Treasurer Tobias Read, signed a statement[10] calling for companies to do more to include people with disabilities. The report said, "Accenture estimates that 10.7 million people with disabilities continue to be underrepresented in corporate America, representing a large underutilized talent pool." In SHE language, disability becomes "other abilities," and the equitable inclusion of these people presents a significant opportunity for companies to improve their performance, enhance workforce diversity, and distinguish themselves by developing an inclusive and sustainable corporate culture… "As investors," the Accenture report continues, "we seek to encourage our portfolio companies to capitalize on the opportunities of disability inclusion. Companies should analyze their disability inclusion policies through a third-party benchmarking tool such as the Disability Equality Index [DEI].[11] Tools like the DEI can provide companies with a comprehensive assessment of their disability inclusion practices and identify opportunities to gain a competitive advantage by improving those practices."

In the UA, the Americans with Disabilities Act (ADA) has made tremendous progress in making workplaces accessible for those with disabilities. However, there is a lot more to be done to make our society accessible to those with disabilities. According to the same report by Accenture cited above, "As of July 2018, only 29 percent of Americans of working age [between ages 16 and 64] with disabilities participated in the workforce, compared with 75 percent of Americans without a disability. In 2017, the unemployment rate for persons with disabilities was more than twice that for those without a disability—9.2 percent versus 4.2 percent." This highlights the need to include "other abilities" metrics in ESG so that companies can improve their disability inclusion strategies and hire more people with disabilities, improving the accessibility of their workplaces, and to cause greater sensitivity to such accessibility in products and services, when identified.

A report[12] by Disability:IN, a non-profit advocating for disability inclusion in the corporate sector, noted that investors are urging regulators to consider including disability status in future workforce reporting requirements for public companies' 10-K filings on financial performance to the US Securities and Exchange Commission.

Additionally, Disability:IN launched the Boards are IN[13] initiative to increase disability representation in corporate boardrooms and executive leadership. This initiative encourages companies, investors, and regulatory bodies to enhance board-level disability inclusion by implementing measures such as disclosing disability data, assessing inclusion efforts through the Disability Equality Index, and collaborating with organizations like Equilar[14] to identify board-ready executives with disabilities.

We present the following metrics that could add disability inclusion to our redefined SHE ESG Framework and make it readily available to shareholders and investors.

1. Digital Accessibility

a. **Web Accessibility:** Accessibility of both internal and external websites as per the WCAG 2.1, with regularly conducted audits and integrating this as part of the company's Corporate Digital Responsibility (CDR) policy.

b. **Events, Documents, and Social Media Accessibility:** Commitment to accessibility in all in-person and virtual events, such as captions, accessible meeting software, sign-language interpreters, physical ramps, etc., and marketing and content materials.

c. **Employee Training:** Internal training focused on digital technical aspects, such as developing products accessible to those with disabilities and educating employees on various disabilities, as well as biases and stigmas around them. This also includes

[10] DisabilityIN, "Joint Investor Statement on Corporate Disability Inclusion," DisabilityIN, December 3, 2020, last retrieved September 16, 2024, disabilityin-bulk.s3.amazonaws.com.

[11] "Disability Equality Index—Disability:In," Disability, August 13, 2024, https://disabilityin.org/what-we-do/disability-equality-index/.

[12] DisabilityIN, "The Case for Disability Inclusion in ESG Investing," DisabilityIN, May 12, 2022, last retrieved September 16, 2024, https://disabilityin.org/wp-content/uploads/2022/05/Disability-Inclusion-ESG-508.pdf.

[13] DisabilityIN, "Boards Are IN," DisabilityIN, last retrieved September 16, 2024, https://disabilityin.org/boards-are-in/.

[14] "The Trusted Source for Executive Intelligence," Equilar, April 2, 2024, https://www.equilar.com/.

ways to incorporate refresh and retention of accessibility principles rather than a one-time training.

2. "Other Abilities" Support

a. **Employment Resource Groups:** Implementation of other ability-specific ERGs with support from stakeholder(s) who identify as having such an other ability.

b. **Accessible Hiring:** Hiring should be equally accessible to people of all abilities, with such equitable accommodations offered throughout the interview and onboarding processes and with interviewers and onboarding staff trained in inclusive practices.

c. **Disability Accommodations:** Employees must be presented with accommodations for their abilities, and instructions to request them must be readily available.

d. **Built Environment Reviews and Audits:** Regular reviews and verifications must be conducted to make sure physical spaces, such as offices, kiosks, meeting and common areas, are accessible to all. In addition, sensory-friendly spaces for people who identify as neurodivergent should be established, and cafés should account for a variety of diets and allergies. As important as physical accessibility is, companies must offer flexible work policies, which include hybrid working or full-time and permanent work-from-home policies.

3. Inclusive Leadership

a. **Board of Directors–Level Positions:** Include people with different abilities in board and management-level positions who are willing to disclose and advocate for inclusion. This also encourages employees to self-identify, which, in turn, leads to an inclusive culture that fosters psychological safety.

b. **Corporate Social Responsibility (CSR):** Support community disability organizations when it comes to philanthropy program goals. Supporting disability-specific organizations that work with people with disabilities to have a direct positive impact.

The EU's Corporate Sustainability Reporting Directive (CSRD), which took effect in January 2023, mandates comprehensive disclosures across sustainability topics. These disclosure requirements are detailed in twelve new European Sustainability Reporting Standards (ESRS) put forward by the European Financial Reporting Advisory Group (EFRAG).

According to a Disability:IN report,[15] reporting on disability in business is moving toward greater transparency as standardized materiality assessments mandated by the Corporate Sustainability Reporting Directive (CSRD) begin to replace voluntary disclosures. As per another report[16] by Disability:IN, reporting on disability using ESRS requires companies to disclose various data such as the percentage of their own employees with disabilities, their processes for engaging with not only their own workforce but also their consumers with disabilities to get their perspectives about impacts affecting them, etc.

The same report states that starting in 2025, large companies based in an EU Member nation state must comply with the CSRD if they meet two of the following criteria: €50 million in net turnover, €25 million on the balance sheet, or 250 or more employees, with data collection beginning in 2024.

Non–EU companies with significant EU market activity (€150 million in annual turnover) will need to adhere to similar reporting requirements in 2026, based on data collected in 2025. These facts underscore the importance of companies taking disability inclusion seriously and not waiting until the last moment to comply, as well as for ESG frameworks and regulators to understand and put these into practice.

2.6 Enabling SHE Through the Power of the Advanced Digital Economy

The Sustainable Human Empowerment framework is more than a vision. It is a digital reality waiting

[15] DisabilityIN, "On the Verge: Disability and Sustainability Reporting in the Europe Fortune 500," DisabilityIN, last retrieved September16, 2024, https://disabilityin.org/resource/on-the-verge-disability-and-sustainability-reporting-europe/.

[16] DisabilityIN, "Corporate Sustainability Reporting Directive (CSRD) and Disability," last retrieved September 16, 2024, https://disabilityin-bulk.s3.amazonaws.com/2024/ESG/CSRD_Disability.docx.

to be activated. Advanced 5.0-level technologies form the backbone that makes SHE possible. They do not supplement the framework; they empower it. Through these technologies, the goals of equity, energy justice, and inclusion are not abstract ideals. They become systems that operate in real time, in real places, for real people.

The digital economy now provides the systems that allow human empowerment to be measured, shared, and scaled (Sun et al. 2023; Mignoni et al. 2024). Artificial intelligence allows for faster recognition of community needs and social gaps (Goralski et al. 2020). Real-time digital sensing can reveal invisible environmental risks and social vulnerabilities (Fan et al. 2020). These tools help companies and institutions act not after harm is done but in the moment harm begins to appear. This is one way digital systems bring ESG closer to the people it is meant to serve.

Edge computing moves intelligence closer to people. It decentralises decisions, allowing better local responses (Deng et al. 2020). This is essential to SHE. In remote or underserved regions, decisions made far away are often slow and out of touch. Advanced digital infrastructure places power in the hands of people who live closest to the problem and often have the clearest insight into the solution.

Blockchain offers transparency and integrity in how ESG data is captured, stored, and verified. It makes shared ownership possible (Almadadha 2024). Through secure digital ledgers, communities can participate in ESG value chains with trust. They can track contributions, confirm outcomes, and claim fair returns. This creates accountability. It also creates inclusion.

SHE depends on full participation. That means tools must be accessible. Digital platforms today allow for voice, image, and sensory input, removing traditional barriers for people with different abilities. Artificial intelligence can translate languages, adapt content, and personalise deliveries for those who were previously excluded from public or corporate systems. Digital technology does not only connect. It also levels the field.

Augmented reality and digital twinning allow policymakers, companies, and communities to simulate decisions before they are made. These models reveal future impact. They make complexity visible. They turn distant strategy into shared understanding. This builds trust—especially when change feels distant or uncertain (West et al. 2021).

Advanced wireless infrastructure, such as fifth and sixth generation mobile networks, enables real-time communication across vast and varied geographies. This is vital for frontier and emerging markets, where the ability to access climate data or join a distributed energy grid can mean the difference between resilience and risk.

Digital 5.0 technologies make SHE possible by placing people at the center of technological systems. These systems do not simply support human empowerment. They aim to enhance it. They offer the capacity to transform ESG from a report into a relationship. This is a relationship where the voices of women, the experiences of marginalised groups, and the innovations of communities are no longer absent, but rather central.

This is the promise of SHE. The digital economy has matured to the point where these ideas are no longer unattainable. They are now within our grasp. What remains is the will to design with people at the center, and the discipline to use this power for equity, inclusion, and lasting sustainability.

3. The SHE Framework Application Model#1: Clean Energy Equity Model

The first model under the SHE ESG Framework is a theoretical example of what we, the authors, propose here for an application of SHE. Clean, renewable energy generation, and its equitable transmission and distribution in the served communities, as well as the MNC development sponsor and partner. (One of SHE's defining first principles is that it calls for full MNC engagement with the communities where the corporate organizations operate, thus giving real collaborative meaning to the "S" in ESG acronym, for community collaboration.)

Model#1 takes advantage of the busy intersection of a growing demand for clean energy development and the need to diversify and democratize policy, planning, development, and ongoing operations as a matter of both sustainability and DEI in action.

Subsequent published editions will be based on case study experience when fully, and in collaborative community, developing and implementing this Framework, The Digital Economist's on-going SHE ESG Framework team will present separate sample models for each major domain and the myriad of subdomains of traditional corporate ESG periodic reporting. Each will reveal the decentralized, democratized, "open-source" intersectionality of private corporate management,the workforce, and the the public social and cultural communities within which they collectively live.

These will address each of the critical environmental, social, and governance issues. SHE Framework(s) and models will analyze and guide this by fully exploring the capacity to bridge the historic silos between sustaining corporate economic health and prosperity while simultaneously the planned sustaining of environmental and social health and stewardship as being first-principal responsibilities of corporations.

Robust, effective SHE ESG Frameworks and Models need to be seen not just as a matter of informing and advising executive management, boards of directors, investors, and governmental regulators on progress, but, rather, as a transformative model representing vast new opportunities for democratizing a corporation's ESG engagement in communities in which they operate.

3.1 The SHE Model#1: Reimagining ESG Through Inclusive Clean Energy and Human Empowerment

Sustainable Human Empowerment (SHE) reframes ESG by placing people at the core of environmental sustainability. It goes beyond compliance and moves into meaningful change that is diverse, equitable, and inclusive, and driven, in large measure, by community participation, wherein the MNC is seen as a key community player. SHE aims to align environmental goals with deep social and cultural values by democratising access to clean energy planning, policy, development, and operations. In this way, clean-energy sustainability is no longer the privilege of a few, but a shared responsibility across all the full community, likely also including in developing, buying and selling carbon and renewable energy credits.

SHE explores how funding and digital innovation can create measurable outcomes in frontline communities, especially in emerging and developing economies. These are regions often left behind in traditional ESG models. By using real-time data and digital tools, SHE provides a new way to track progress and share benefits more widely. It seeks to close the long-standing gaps between environmental stewardship, social resilience, and economic opportunity.

The SHE framework is designed to foster collaboration between corporate actors and local communities. It supports strategies that

reflect cultural sensitivity, collective problem-solving, and shared innovation. The model calls for the integration of local knowledge, digital transformation, and community-led methodologies in ESG implementation. SHE sees inclusion not as a goal but as a method where DEI and embracing underserved communities is a critical part of system design thinking, not just as an outcome.

In these frameworks and models (clean energy is just one such, remember) Digital 5.0 plays a vital role. Advanced digital tools, such as real-time sensing, monitoring, AI-enabled realtime analytics, satellite GIS mapping, and digital twin modelling, will support transparency, enable the ease of compelling communication, real-time immersive, experiential visualization of both the impacts of scalability and transparent accountability.

These tools help turn abstract plans and commitments into visualized progress on the ground. SHE recognises that technology availability and transfer, especially to low- and middle-income countries and communities, is essential for levelling out global access to clean, renewable energy.

SHE also addresses long-overlooked areas of ESG, such as lack of disability inclusion and social equity embodied within global supply chains, just as GHG emissions are.

It integrates diversity, equity and inclusion (DEI) into every step of ESG decision-making. By framing clean energy access as a human right, SHE transforms the conversation around climate justice. Programs like Women in Renewable Energy (WiRE) show how inclusive models can unlock innovation, build jobs, and expand leadership.

By grounding ESG in human empowerment, SHE shifts the purpose of sustainability from reporting metrics to building real-world effective change. It brings a sharper focus on distributed leadership, social justice, and community empowerment and resilience. This is not a minor adjustment. It is a new paradigm for corporate ESG responsibility that integrates social equity, environmental innovation, and digital intelligence into a single cohesive system. SHE is ESG reimagined for everyone.

3.2 Bridging Gaps

The **SHE Framework Model#1: Clean Energy Equity** bridges critical gaps between new energy wealth creation and the goals of SHE ESG—advancing environmental and social justice, poverty alleviation, and DEI writ large.

- **Global clean energy market growth is projected to reach USD 3.7 trillion by 2028** at a 9.4 percent CAGR *(Source: MarketWatch 2024).*

Despite improvements in air quality and human health, local communities often receive only a fraction of the new wealth created through the energy transition. Structural inequalities persist where vulnerable groups—particularly in emerging and developing economies—are excluded from meaningful economic participation.

Rising demand for rare-earth minerals used in clean energy production methods such as solar voltaics or wind turbines or in electric vehicle transport in emerging and developing economies can result in areas with already highly vulnerable populations and already suffering from the effects of rural poverty being even more susceptible to "new" abuses. Energy transition engineering requires numerous critical minerals such as lithium, nickel, cobalt, copper, and other rare-earth elements that are essential.

For example, cobalt mining in the Democratic Republic of Congo[17] has been tied to modern-day slavery, human trafficking, and as well as women and child labor, often under abusive working conditions. Importantly, "Women and girls living in cobalt-mining communities in the Democratic Republic of the Congo are reporting a ***staggering*** rise in serious reproductive health issues, including miscarriages and birth defects," according to a new report.

An investigation published by the UK-based human rights group Rights and Accountability in Development (RAID) and the Kinshasa-based

[17] Harvard Care Center, "Cobalt Red: Modern Slavery, Child Labor, and Cobalt Mining in the Democratic Republic of Congo," accessed September 22, 2024, https://youtu.be/zrF2vVoYCwI.

NGO Afrewatch[18] found that "women and girls living around cobalt mines reported experiencing irregular menstruations, urogenital infections, vaginal mycoses, and warts" (as reported in *The Guardian* on March 12, 2024).[19] In the case of cobalt mining, the Fair Cobalt Alliance[20] is fully intended to mitigate this.

Such human and worker rights, safety, and health abuses can frequently happen when local communities and peoples are excluded from any real earnings for their labor, as well as any collaborative participation in decision-making processes, undermining, if not outright prohibiting, anything resembling energy democracy.

Electric vehicle manufacturers and tech companies that rely heavily on critical minerals like cobalt must also be held accountable. While Tesla is a founding member of the aforementioned Fair Cobalt Alliance and published its first edition of The Conflict Minerals Report[21] in 2018, meaningful transparency and accountability in mineral sourcing remain limited.

Policies must be adaptable and inclusive to address these challenges. Considering the dynamic nature of clean energy expansion, innovative digital solutions like blockchain technology, smart contracts, and tokenization offer the potential for increased transparency, decentralization, and democratization of control—in other words, the pathway to environmental and social equity and justice.

The active inclusion of local and Indigenous communities in clean energy project design, the establishment of protected environment and community areas, and promotion of economic diversification are essential to ensuring that the "green transition" genuinely contributes to human empowerment, poverty alleviation, and DEI, in general, rather than perpetuating historic existing inequalities.

Having a strong regulatory framework is necessary to have clear and enforceable provisions to ensure compliance and market equity balance and stability. This includes giving local communities decision-making power and transparent access to benefits from infrastructure and energy development projects.

As a key component of DEI, it's also crucial to recognize that climate justice is an issue for people with disabilities who may face heightened risks and challenges from climate change. Extreme weather events can exacerbate existing health conditions, making everyday life even more difficult and potentially dangerous. For instance, people with mobility challenges may struggle to access emergency shelters or evacuate during natural disasters while those with visual or hearing impairments may have difficulty accessing early warning systems. In many countries, the lack of accessible infrastructure further compounds these risks.

Daphne Frias, an activist with Zero Hour,[22] a youth-led climate action group, shared in an interview[23] with *In These Times* how her cerebral palsy, which impairs her ability to sweat, has been increasingly aggravated by rising and record-setting temperatures attributable to climate change. Therefore, it is crucial to make sure that individuals with disabilities are part of the planning process for climate resilience. This is essential for creating a genuinely human-centered approach to ESG—one that tackles the entire range of social vulnerabilities and offers solutions that foster equity for everyone.

Additionally, people with disabilities often face high unemployment rates. Businesses and governments should invest in inclusive sustainability initiatives—such as inclusive urban design, accessible architecture, and green infrastructure development—creating jobs where lived experiences enhance impact.

[18] AFREWATCH, African Resource Watch, 2024, https://afrewatch.org/.

[19] "'Staggering' Rise in Women with Reproductive Health Issues Near DRC Cobalt Mines Study," The Guardian, March 2024, accessed September 22, 2024, https://www.theguardian.com/global-development/2024/mar/28/staggering-rise-in-women-with-reproductive-health-issues-near-drc-cobalt-mines-study#:~:text=Women%20and%20girls%20living%20in,according%20to%20a%20new%20report.

[20] Fair Cobalt Alliance, "Cobalt Credits: Incentivising and Enabling Responsible Artisanal Cobalt Production," Fair Cobalt Alliance, accessed September 22, 2024, https://www.faircobaltalliance.org/approach/responsible-cobalt-credits/.

[21] Tesla, "Tesla Conflict Minerals Report," Tesla, 2018, accessed September 22, 2023, https://www.tesla.com/sites/default/files/about/legal/2018-conflict-minerals-report.pdf.

[22] This Is Zero Hour, "Support Zero Hour and Amplify the Voices of Youth Organizing for Climate Action," 2024, accessed September 22, 2023, https://thisiszerohour.org/.

[23] Jessica Kutz, "Climate Justice Is a Disability Issue," July 2023, accessed September 22, 2023, https://inthesetimes.com/article/climate-environment-activists-disabilities-disabled-disability-barriers-accessibility-strike.

Designing with the needs and accessibility requirements of a minority group in mind often results in solutions that benefit the broader population, creating more inclusive and effective environments.

Some companies are already taking proactive steps to integrate sustainability and disability inclusion. A policy brief[24] by the International Labor Organization cites the example of Électricité de France (EDF)—a leading European producer of renewable power—which has expanded its renewable energy production from eight gigawatts (GW) to over fifty GW by 2030 for over twenty-five years. It states that in addition to its environmental goals, EDF has been a pioneer in disability inclusion. As a member of the ILO Global Business and Disability Network (GBDN), EDF has "established multi-stakeholder networks and governance mechanisms to support employees with disabilities." These initiatives foster an inclusive work environment and ensure people with disabilities have a voice in decision-making across their organization.

In the same vein, the SHE framework emphasizes the disparities in vulnerability to climate impacts. The Global South, which is home to more than 80 percent of the world's population, is facing the harshest impacts of climate change, even though it contributes the least to global emissions (Ritchie 2023).[25] Regions in Africa, South Asia, and Latin America are experiencing more severe climate impacts, including droughts, floods, and extreme weather events (Almulhim et al. 2024; Ngcamu 2023). For example, in Bangladesh, frequent flooding forces millions to leave their homes and worsens poverty, all while the country struggles with inadequate infrastructure that makes it difficult to handle these disasters effectively (Paszkowski et al. 2024). Despite this, countries in the Global South are under significant pressure from the Global North to sign climate agreements, often without getting the financial support or technology transfer they truly need. This imbalance highlights a significant shortcoming in the human-centered approach to ESG. The most vulnerable populations are facing the brunt of climate change's effects, yet they often do not have the means to adapt or lessen these impacts (Ritchie 2023).

ESG frameworks frequently face criticism for greenwashing, a tactic where companies make climate action claims without making any real changes. A key example is that women in the Global South bear the brunt of climate change, with UNDP (2022) reporting that women are fourteen times more likely to die in natural disasters. Okai (2022)[26] recalled that out of the 230,000 lives lost in the 2004 Indian Ocean tsunami, a staggering 70 percent were women. In Bangladesh, women and children are disproportionately affected by frequent flooding, facing not only physical displacement but also a loss of livelihoods.

These realities emphasize the importance of adopting a genuinely human-centered ESG approach. It's crucial to consider the specific vulnerabilities faced by women, people with disabilities, and marginalized communities, making sure their voices are at the forefront of climate action and policy-making.

3.3 Broadening DEI: Metrics for Equity in Energy, Work, Health, and Entrepreneurship

A range of metrics can be employed to assess equity across multiple dimensions, including energy security, labor market inclusion, political enfranchisement, educational empowerment, public health accessibility, and sustainable entrepreneurship.

Labor market inclusion:

a. **Labor Market Participation:** It can gauge the amount of minorities entering the workforce and seeking out higher-skilled, higher-paying jobs.
b. **Job Creation Rates:** Clean energy transitions can allow for burgeoning renewable energy industries. Deagriculturization and the growth of renewable energy alternatives can create new job opportunities as the product of industry creation and diversification.

[24] ILO, "Persons with Disabilities in a Just Transition to a Low-Carbon Economy," ILO, 2019 accessed September 22, 2023, https://www.ilo.org/media/405946/download.

[25] Ritchie H., "Global Inequalities in Co_2 Emissions: There Are Massive Differences in Emissions Across the World. How Do Income Groups and Regions Compare?" Our World in Data, retrieved March 19, 2025, https://ourworldindata.org/inequality-co2

[26] Asako Okai, "Women Are Hit Hardest in Disasters, So Why Are Responses Too Often Gender-Blind?" United Nations Development Program, retrieved March 19, 2025, https://www.undp.org/blog/women-are-hit-hardest-disasters-so-why-are-responses-too-often-gender-blind.

c. **Upskilling Rates:** As new markets and sustainable and circular industries emerge, it will be critical to evaluate the percentage of women who are filling job openings. These gender demographics can be tracked by the rates at which women are upskilling to enter jobs in renewable industries (e.g., solar energy farms, solar microgrid development, and maintenance).

Political enfranchisement:

a. **Political Inclusion in Energy Policy:** The percentage of women and people with disabilities in political and civil roles related to energy policy is a key indicator of their inclusion in decision-making processes.
b. **Gender or Disability-Segmented Voter Turnout Rates:** The voter turnout of women, for example, is integral to female representation in energy policy, as political discussions are shaped both by the individuals who hold appointive offices and by the citizens who elect their legislative policy representatives.
c. **Gender and Disability-Conscious Legislation Rates:** Another metric that can directly reflect inclusion in political spheres is both the quantity and quality of legislation that advocates for gender equity and inclusion. Tracking gender-conscious legislation can be a clear indicator of gender equality and disability inclusion.

Educational empowerment:

a. **Education Rates Among Minorities:** It can track how many minorities are seeking an education and are able to access higher education at any given point.
b. **Secondary and Post-Secondary Graduation Rates:** By tracking these rates, policymakers can observe whether minorities are retained in academia and continue their education through graduation, ensuring that they do not leave education programs before reaching graduation.
c. **Adoption Rates of Digital Virtual Learning and Skills Training:** By minimizing blackouts and brownouts, minorities and vulnerable populations can participate in global educational offerings through online forums such as digital university classes and web-based interactive video instruction, bridging the gap between education and access.

Public health accessibility and democratization:

a. **Health-Care Affordability Benchmarks:** Since health care is an energy-intensive sector, energy insecurity often results in inefficiencies, reduced performance quality, and increased operating expenses due to energy blackouts, brownouts, or grid distribution failures. As cities gain clean energy availability, comprehensive and efficient smart grid storage, transmission and distribution reliability, and security, the cost of health care services will be reduced, allowing at-risk and vulnerable populations to gain better access to essential services.
b. **Quality of Care Benchmarks:** Tracking the quality of patient care—through patient satisfaction surveying—can measure whether health care institutions are effectively serving diverse communities that have had a history of inaccessible public health infrastructure.
c. **Cost of Public Health Necessities:** By measuring the cost of health necessities, such as prescription drugs and sanitation products and equipment, policymakers can gauge the accessibility of public health essentials. In doing so, they can assess how clean energy transitions in public health settings can increase energy security and decrease production costs to minimize the prices of goods.

Sustainable entrepreneurship:

a. **Female- and Disability-Owned Businesses:** By tracking the percentage of these, policymakers can provide incentives for women and people with disabilities to find small businesses and engage in entrepreneurship to revitalize economies and allow for equality across industries.
b. **Voluntary Carbon Markets:** The potential for socially conscious carbon credit trading exchanges is truly worthy of consideration here. As an example, why would it not be

possible to share revenues from the sale of beneficial sale of carbon credits with the communities most highly impacted? Why would it not be possible to apply a portion of revenues from such sales to microlending programs that encourage small business entrepreneurship?

3.4 Specifics of the SHE ESG Framework Model#1: Clean Energy Equity

Table 1: Conceptual SHE Framework modified to the following heads

ENVIRONMENTAL	SOCIAL	GOVERNANCE
Clean energy justice	Equity and inclusion	Data accessibility, authenticity, public transparency
Climate change resilience and adaptation	Public health democratization	Diversity-inclusive leadership and political enfranchisement
	Supply chain social justice	

ENVIRONMENTAL

Clean-energy justice

a. Corporations must ensure the development of and equitable access to clean, affordable energy, prioritizing the communities and regions in which they operate and extending this responsibility nationally and globally where possible.

b. Corporations are required to implement or participate in decentralized, community-owned, and operated renewable energy generation, storage, transmission, and distribution projects.

c. Corporations must prioritize underserved and impoverished communities, measuring the impact through increased access to clean energy and reduced energy poverty in target communities.

Climate-change resilience and adaptability

a. Corporations must, in collaboration with all stakeholders, develop strategies that address the disproportionate impacts of climate change on impoverished and vulnerable populations and communities in emerging and developing regions.

SOCIAL

Equity and inclusion

a. Corporations must foster an inclusive corporate culture that values DEI at all levels and in all forms, including gender, disability, and other underrepresented diverse groups.

b. Corporations must implement accessible digital and physical environments.

c. Corporations must adopt supportive and inclusive practices across all operations.

Poverty alleviation and economic empowerment:

a. Corporations must integrate poverty reduction into overall business strategies, focusing on job creation, skills training, and upskilling.

b. Corporations must support DEI access to economic participation, particularly for underrepresented groups.

c. Corporations must consider poverty reduction in their business strategies,

particularly by empowering local communities to bid for contracts (supplier and project management) where appropriate.

d. Corporations must develop affordable products and services tailored to meet the needs of low-income markets.

e. Local entrepreneurship, microfinance programs, and job opportunity initiatives should be encouraged in high-poverty areas.

f. Corporations must assess DEI and report on its impacts by tracking changes in local employment rates and income levels.

Public health democratization

a. Corporations are encouraged to address the intersection of clean energy and health care, focusing on DEI availability, accessibility, and affordability, particularly for vulnerable populations.

Supply chain social justice

a. Corporations are responsible for ensuring fair labor practices, ethical sourcing, and DEI policies throughout the entire supply chain.

b. Supplier audits and reporting should be implemented to adhere to GHG (emissions) protocols and social DEI standards.

c. Local communities' supply-chain players should be considered and empowered to provide resources, materials, and products to corporations when possible. Suppliers should receive training and support to meet necessary industry standards.

d. Encourage "*voice of the worker*" programs.

e. Improvements in working conditions and wage levels across the supply chain should be tracked, with a particular focus on local community suppliers and transparent reporting

GOVERNANCE

Data accessibility, authenticity, public transparency

a. Corporations should enhance stakeholder and public accessibility and transparency in ESG reporting by utilizing user-friendly digital data visualization platforms, ensuring inclusivity for all stakeholders.

Energy democracy and participation

a. Corporations should empower community stakeholders in clean energy policy, planning, and development decision-making, with a focus on increasing DEI participation in clean energy policy and projects.

b. Local clean-energy governing committees shall involve representatives from local community stakeholders with real decision-making power.

c. Corporations may explore and encourage equitable community ownership and governance participation.

d. Measure and report success through the attainment levels of local community stakeholders, workforce participation, and community satisfaction with their clean energy initiatives.

Inclusive leadership and political enfranchisement

a. Corporations must promote DEI in corporate, community, political, and administrative-agency leadership, ensuring these leaders advocate for diversity and inclusion policies.

b. Corporations must support initiatives aimed at increasing the political participation of underrepresented groups in governance.

4. SHE Framework Model #1: Clean Energy Equity "Phase-Wise" Implementation

Phase 1: Assessment and planning

This phase lays the foundation for next-level ESG: the successful implementation of the SHE Framework for each new program and project "model" business case, each with its own unique, bespoke characteristics relative to the SHE Framework. It begins with ensuring top-level (by name and title) executive commitment and as a "champion."

SHE Framework is given dedicated leadership for both Framework and model initiatives from both the corporate sponsor and the intended co-owning (if possible) collaborative community stakeholder partners. The corporate sponsor champion should fully understand that this is not to be a top-down mandate but rather a bottom-up buy-in participation of the corporate workforce as a living practice of community building as a corporate value.

A comprehensive assessment is conducted across all SHE metrics to first establish a baseline and then identify gaps and priorities, likely by identifying areas where "early wins" help build stakeholder community confidence.

Additionally, diverse stakeholder groups are formed and engaged as, first, planning advisory panels, to be followed by the formation of empowered functional working groups, ensuring all-stakeholder-inclusive collaborative inputs and approaches from the start.

This phase aims to generate a developmental roadmap for the entire model implementation process, establishing a clear understanding of the current baseline state and the achievement path forward.

Phase 2: Model#1 program or project strategy and design, build, operate, and maintain

Model Development from comprehensive knowledge, insights, and benchmarks gained during *phase 1 above.* Specific, measurable targets should be established for each SHE Framework category of the model version being developed, with clear, precise short-term *(with an "early wins" focus)*, mid-term, and long-term objectives.

Policies will be developed, recommended, or updated to align with SHE Framework principles, and detailed action plans will be created for each focus area of the model. Resource planning is a key component, with budget needs projection, personnel assigned to model initiatives, and potential collaborative partnerships identified. This phase transforms the SHE Framework from a strategic "concept" to an "action" operating plan.

Phase 3: The initial implementation

This phase entails the translation of the SHE Framework into a project model. Nothing planned for in the model should vary from the first principles of the SHE Framework, and no changes should be made to implementing a model plan that isn't, first, ensured to align with the Framework. Workshops, training courses, and achievement of certifications on SHE Framework principles shall be delivered continuously to build knowledge and skills broadly among all internal and external community stakeholders. This "bakes into" the model of methodological consistency and process continuity. This phase also entails the integration of knowledge and skills training on the necessary human capital and technological solutions, as well as both physical and digital infrastructure planning and development and improvement for the successful implementation of SHE Framework model projects.

Proof of concept pilots of minimal viable product (MVP) pilot demonstration projects in high-priority

areas are launched, providing the opportunity for quick adjustments and, again, early wins to build buy-in confidence and momentum, demonstrate unique value propositions (UVP), and serve as a benchmarking for next-phase funding and development.

This phase is crucial for embedding SHE Framework principles into the organization and its collaborative stakeholders and cultures, thus setting the stage for broader and deeper implementation.

Phase 4: Integration and expansion

In this phase, the SHE Framework and program/project models are extended beyond the organization's traditional and immediate boundaries in this phase. It involves integrating SHE Framework criteria into the full value chain, from supply chain management and logistics up through to production programs and out through to local cooperative, collaborative, co-ownership stakeholder communities.

Community engagement intensifies with the initiation of local projects and partnerships. Products and services are reviewed and adapted to align with SHE principles, potentially leading to new models and offerings that address identified needs. This phase solidifies the organization's commitment to holistic sustainability and social impact.

Phase 5: Monitoring, measuring, verifying, and reporting

Monitoring and measuring is implemented and executed simultaneously with other phases to ensure transparency, performance accountability, and improvement measurement. AI-enabled and automated data collection and analytics are implemented across all metrics.

Regular, comprehensive, transparent, and accessible DEI in ESG reporting is developed for all stakeholders' information and feedback. Program strategies are regularly reviewed and adjusted based on data and feedback, ensuring that solution approaches remain current and effective or are modified with new and superior knowledge—and, again, in full alignment and approval for the model with the SHE Framework. This phase embeds a culture of all-stakeholder open collaboration, continuous learning, and rapid adaptability to changing circumstances.

Phase 6: Advanced Implementation

In the final phase, the organization focuses on leadership and long-term value creation. Organizations develop innovative digital technology solutions to persistent challenges and share best practices, advocating for industry-wide adoption of SHE Framework principles.

All-stakeholder collaboration expands to include recognized independent subject-matter expert advisers, industry peer organizations, relevant government agencies, and NGOs, all contributing to SHE Framework policy development and standards-setting. SHE Framework principles are fully integrated into core business strategies, demonstrating and communicating their long-term value. This phase establishes the organization's position as a leader in sustainable, human-empowered business practices.

Scoring and Integration

1. Each component is scored on a scale of 0–100 based on established industry standards and benchmarks.
2. Overall SHE scores are calculated in accordance with weighted averages of component scores.
3. Companies report on these metrics annually, with a third-party audit and verification.
4. The SHE Framework allows for industry-specific adjustments in score-weighting

5. CONCLUSION

The Digital Economist Sustainability Workgroup team, which developed the SHE ESG Framework, fully understands that this is the first tentative step on a long road to acceptance and implementation. That said, it represents (insofar as we know) the first design and systems-thinking overhaul to ESG, particularly at a time when a number of high-visibility brands are backpedaling Justice, Equity, Diversity, Inclusion (JEDI)—the latest large multinational corporation, as of publication date, being Ford Motor Company.

The team that worked on this understands the enormity of the challenges in any attempt to recast investor and corporate leadership behavior. We ask, however, and in light of the intent of this book *Healing a Broken World* to ask yourselves when is it, exactly, that we begin the quality of conversations necessary to heal the Earth from the mounting costs and effects of climate change?

So if you find this sufficiently interesting, we look forward to chatting with you at The Digital Economist. We know this is a first-step work in progress. Are you willing to openly consider taking that step with us?

Appendix

A. Interview with Aldyen Donnelly

1. Integrated ESG Reporting in Standard Financial Statements
    a. Focus on high-level, easily understandable metrics integrated into standard financial reports.
    b. Mandate disclosure of emissions per dollar of earnings in financial reports.
    c. Report potential GHG emissions from proved and unproved reserves on balance sheets.
    d. Disclose GHG implications of capital expenditure plans in cash flow statements.
    e. These measures would do the following:
        - Increase transparency and comparability of corporate environmental performance
        - Align climate considerations with core financial metrics
        - Drive meaningful conversations about sustainability among investors and stakeholders
        - Encourage companies to improve carbon efficiency and shift toward sustainable strategies

2. Comprehensive Corporate Reporting by Nationality
    a. Standardize reporting of revenue, employment, payroll, and taxes paid by country.
    b. Mandate reporting of employee demographics (including disabled workers and gender) by nationality.
    c. This would
        - highlight global disparities in corporate practices
        - promote fair wages and working conditions across all nationalities
        - encourage inclusivity and diversity in global operations

3. Prioritizing Key Values in Policy Decisions
    a. Focus on five key areas: clean water supply, secure food supply, safe and affordable shelter, energy, and access to nature.
    b. This approach ensures that sustainability efforts address fundamental human needs and environmental concerns.

4. Energy Resilience and Community Empowerment
    a. Prioritize micropower grid development for local energy resilience.
    b. Promote community involvement in energy decision-making.

5. Addressing Poverty and Inequality
    a. Promote integrated social housing within broader communities to reduce economic segregation.
    b. Use nationality-based reporting to address wage disparities and promote fair labor practices globally.

6. Transparency and Accountability Measures
    a. Make nationality-based reporting standards in financial disclosures.

B. Interview with Catherine Atkin

1. Social Justice and Equity Value Chain
    a. Indicators should be identified to measure a company's effort to ensure social justice throughout its full value chain.
    b. The Expert suggested the EU's Corporate Sustainability Due Diligence (CSDD) as a potential framework for the measurement.
    c. The EU's Corporate Sustainability Reporting Directive (CSRD) shall also be used as a point of reference, which will ensure companies provide extensive, regulated, and mandatory disclosure of their value chain impact on the environment and community.

2. Workers' Rights, Living Wage, and Slavery
    a. Catherine Atkin highlighted the complexities of upholding workers' rights in different countries. She mentioned the tension between corporations' responsibility to meet basic human rights standards and the potential negative impacts on local communities and ecosystems.
    b. The concept of a "living wage" and the challenges of defining it, as well as the measures to be taken if a company fails to prove the standard "living wage," are highlighted.

3. Climate Resilience and Policy Implementation
    a. The importance of climate resilience and policies that benefit the local communities and developing economies has been highlighted.
    b. Climate adaptation measures should be quantifiable to understand and balance mitigation strategies, biodiversity, and adoption benefits.
    c. Successful policy implementation and the strong political will [and pressure] in the effective and equitable distribution of resources should be ensured.

4. Women in Leadership and Clean Energy Metrics
    a. The underrepresentation of women in leadership positions is well highlighted, and the potential positive impact of women holding leadership positions in both the community and politics has been stressed.

5. Clean Energy
    a. Prioritize measuring the company's contribution to clean energy.
    b. The government should implement stringent policies for companies to create a cleaner energy grid.

6. Decarbonization, Democratic Participation, and Company Roles
    a. Big companies have a huge role to play in democratic decision-making, particularly in their supply chains and the country in which they operate.
    b. Collective consciousness and actions among customers force companies to improve their ecological footprint at both local and global levels and throughout their supply chain.
    c. Mandatory reporting and regulation should be emphasized to encourage companies to reduce their carbon footprint.
    d. Potential impact of sound and strict

government policies and intervention on companies and their supply chains.

7. AI, Decarbonization, and Equitable Access
    a. The potential of artificial intelligence (AI) in improving data collection and reporting, particularly in the context of decarbonization, has been highlighted.
    b. Emphasis on open access to data and the potential of digital taxonomies like XBRL for easier data aggregation has been put in the discussion.
    c. AI has the potential to empower individuals and small businesses through automatic tasks and provide climate-resilient insights. However, due to its high cost, the technology's accessibility is limited to only large cities and big companies.

8. Addressing Poverty Reduction and ESG Framework
    a. Rather than the effectiveness of the ESG framework in measuring companies' efforts in poverty reduction, the interviewer suggested that supply chain regulation could be a better way to ensure companies' responsibility and obligation toward the climate.
    b. Inclusion and diversity strategies in the current ESG framework, and the role of big corporations in policy formulation.

9. Assessing Diversity's Impact on Companies
    a. Quantifying and assessing the impact of diversity and inclusion policies and programs within companies is emphasized.
    b. Companies that include a diverse population—women and persons with disability—in their workforce experience a positive impact on their profit margins.
    c. The inclusion and diversity principle needs data support for its implementation.
    d. The significance of strategies and structures specific to different populations is highlighted, allowing for better feedback and decision-making power.

C. Interview with Reid Jewett Smith: Disability:IN

We spoke with Reid about her work at Disability:IN and the significance of disability inclusion in ESG. She highlighted that disability is a critical aspect of sustainability and that a disability-inclusive company is smart. Reid also discussed the importance of the upcoming European Accessibility Act, which will become law in all twenty-seven EU member states on June 28, 2025, and the Corporate Sustainability Reporting Directive, which will replace voluntary disability disclosures in business with standardized materiality assessments.

In addition, she underscored the need for commitment to inclusive suppliers, asking if companies allocate a specific amount of their budget to disability-owned businesses. She suggested a useful metric could be whether companies inquire if their suppliers' products and services are accessible. Reid further emphasized the importance of self-identification (self-ID), how many employees engage with it, and board diversity disclosures in human capital management reporting.

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