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The ESG and the Multi-Employer Worksite: Protecting Workers and Best Practices in Construction

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KEYWORDS

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ABSTRACT

Construction is a high-risk industry. The built environment is a major source of carbon emissions and energy consumption. The time is now for this industry to embrace environmental, social, and governance (ESG). The construction industry lags behind many industries in their adoption of Corporate Social Responsibility (CSR) and Sustainability Reporting (SR) with strategies to preserve human health and the environment in perpetuity. The multiemployer construction worksite is unique in that responsibility for ESG and Occupational Safety and Health (OSH) are often delegated to those subcontractors who have the least resources to practice CSR, SR, and effective OSH. The General Contractor (GC) has the power and responsibility to coordinate and support CSR, SR, and effective OSH. Organizations such as BREEA, IWBI-WELL, GBC, LEED, Green Globes, ISO, and others are available to assist companies in becoming good environmental citizens. In the US, OSHA has promulgated regulations to protect workers. The multiemployer worksite is controlled by the GC, who can ensure that all subcontractors are compliant with OSH regulations, as well as encourage and coordinate ESG initiatives. Best practices have been developed and disseminated to the construction industry. Humanity's future is at stake, and the construction industry must step forward and become leaders in ESG and OSH.

1. INTRODUCTION

Profitability and success are foundational goals for most businesses in today's competitive markets. Construction companies in the US and around the world operate within highly competitive environments, conditions, and circumstances and look for competitive advantages on all levels. Companies seek effective approaches to stability, profitability, and growth, sometimes at the cost of good OSH management, worker safety, health, and wellbeing. One industry approach to increasing the competitive advantage is the integration of Corporate Social Responsibility (CSR) through Sustainability Reporting (SR) also linked with Socially Responsible Investment (SRI) (Soares and Pereira, 2022). There is an increasing demand for greater transparency in environmental, social, and governance (ESG) disclosures in all industries (Siew, 2017).

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ESG factors are frameworks that can be used to measure and evaluate corporate activities, health, and responsibility in today's global marketplace. The environmental frame looks at metrics such as energy used, waste streams, waste management, pollution, resource consumption, and impacts to communities and the planet; see Figure 1 (Assef and Mangold, 2022; Kim and Chang, 2022; Siew, 2017). Construction methods are a major ESG environmental factor in the building industry, as are materials, water consumption, and future-proofing design to mitigate climate change (Assef and Mangold, 2022).

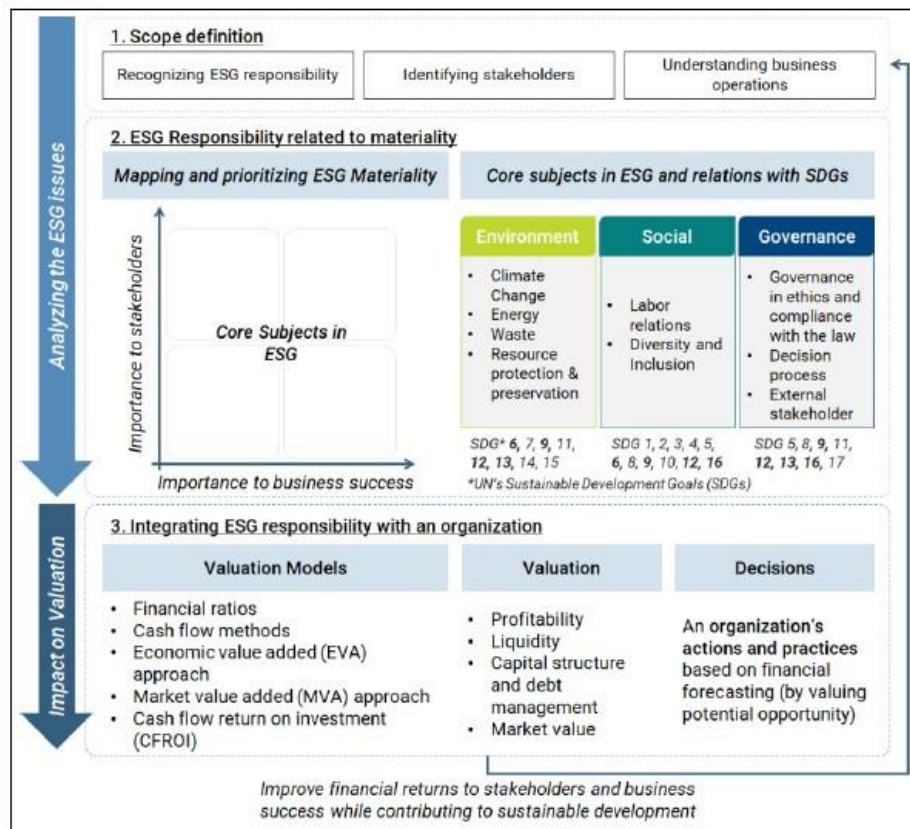


Figure 1. ESG Integration Framework
(Kim and Chang, 2022, p. 238)

The social frame includes factors such as social responsibility for transparency and ethical behaviors of people, institutions, and communities (Kim and Chang, 2022) including working conditions, labor practices, health and safety, and community engagement (Siew, 2017). Construction should consider community impacts such as transportation and access for the disabled (Assef and Mangold, 2022). The governance frame looks at organizational leadership, management, and decision-making that reflects ethical practices in compliance with all laws and to satisfy stakeholders (Kim and Chang, 2022) including executive pay, board diversity and structure, donations, bribery, and corruption (Siew, 2017), procurement and supply chain, and stakeholder engagement (Assef and Mangold, 2022). ESG is being used to improve markets, industries, corporate images, and social and environmental citizenship. Companies that practice ESG principles have proven to be more sustainable, develop resources for long-term stability and prosperity, and focus on continuous improvement, optimizing activities, initiatives, and financial outcomes (Balatbat, Siew, and Carmichael, 2012; Soares and Pereira, 2022). The Global Reporting Initiative (GRI) has developed tools and training to assist companies committed to CSR in SR with 41 established disclosure standards (GRI, 2023). Managing the triple bottom line of economic, social, and environmental concerns is a competitive action that creates market advantages and is key to developing CSR (Glass, 2012; Siew, 2017). The multi-employer worksite challenges the

commitment of CSR and SR by delegating the responsibility for incident reporting and safety and health to the subcontractors, who have a paucity of resources to address these needs and responsibilities. Companies must be able to assign personnel, coordinate, and communicate CSR concepts, SR practices, and safe work behaviors among the many trades typically seen on construction sites.

2. THE CONSTRUCTION INDUSTRY IN THE US

An estimated 7.8 million workers are employed in the US construction industry, contributing 4.3% to the gross domestic product (GDP) (Kolmar, 2023) valued at \$2.1 trillion (Bokum, 2023). Construction work remains among the highest-risk industries year after year. An estimated 5,190 workers from all industries died in 2021 in job-related accidents (BLS, 2022). The construction industry ranked #1 in loss of life in 2021 with 986 fatalities, comprising 19% of all work-related deaths (BLS, 2023) and yet the industry made up only 2.8% of the total labor market (BLS, 2022) with 680,000 employers (Klomar, 2023). Falls continue to be a leading cause of death in construction, with 370 lives lost in 2021. Lack of or improper fall protection was the #1 safety violation in 2021, resulting in OSHA citation (OSHA, 2023).

Construction is a dynamic and rapidly changing work process that is replete with hazards and risks that must be proactively managed to protect the health and well-being of onsite workers and maximize business returns. Safety pays. Experts evaluated 18 construction case studies to investigate business performance in relation to safety and found that 66% (2%–104%) increases were seen in productivity, 44% (4%–73%) in quality, 82% (52%–100%) in safety records, and 71% (38%–100%) in cost benefits (Maudgalya, Genaidy, and Shell, 2008). Effective safety and health management is a competitive advantage (Rechenthin, 2004).

The decentralized multiemployer business model with owners, developers, general contractors, subcontractors, and sub-subcontractors does not effectively meet individual and collective stakeholder needs and responsibilities. The lack of effective and committed central management on multi-employer worksites creates challenges for ESG and SR as well as numerous safety challenges not seen in other types of construction operations managed by the general contractor.

The 1992 Earth Summit in Rio de Janeiro, Brazil, yielded Agenda 21 to support sustainability (UN, 1992). The agenda was supported by the International Council for Research and Innovation in Building and Construction (CIB). The CIB is organized into a network of over 1,351 experts from more than 75 member organizations across 53 countries (CIB, 2023). The organization encourages multidisciplinary collaboration to address complex challenges such as sustainability. The CIB is sponsoring the World Sustainable Built Environment virtual conference scheduled for June 12-14, 2024. Collaboration is ever more important on the multiemployer worksite. The construction industry has been slow to adopt Agenda 21 principles due to the fragmented nature of work and the multidisciplinary nature of worksite design (Siew, 2017).

3. THE MULTIEMPLOYER WORKSITE IN CONSTRUCTION

The multiemployer worksite is common to construction and must be managed centrally, or it creates barriers to CSR, SR, effective OSH, and meeting the needs and responsibilities of all internal and external stakeholders. Central management by the general contractor is the most effective approach to ensuring safety compliance, reducing losses and liability, improving company reputation, and

achieving a competitive advantage (Glass, 2012). The National Association of Home Builders states that there are "five basic root causes" for safety and health failures: 1) lack of management commitment and practice; 2) lack of continuous training and education; 3) lack of safe work values; 4) lack of proper rules and procedures; and 5) lack of accountability and responsibility (Gilkey et al., 2003; NAHB, 1995). The residential multiemployer worksites are among the highest-risk construction operations and need central management from the GC to both coordinate safety and health among the many subcontractors and develop a commitment to ESG.

Management commitment to safety and health is critical to the ongoing success of construction companies and projects, especially on multiemployer worksites. The owners, superintendents, and GCs create the safety climate and culture by setting the tone, establishing the expectations and standards of operation, and communicating and enforcing the rules, thus guiding the day-to-day work practices through their policies and behaviors (Gilkey et al., 2012). The GC must have a written policy, effective communication skills, and exemplary practices for project management and effective safety and health (Gilkey et al., 2003). Companies must integrate safety and health into their management structure as a value, thus enhancing the safety climate on the site and effectively building cooperative relationships between all parties to ensure a safe and healthy worksite.

The owner, superintendent, and general contractor have the greatest power to affect production schedules, safe work practices and conditions, coordinate change, designate responsibility, and hold stakeholders accountable for not only deadlines, materials, and equipment but also ensuring safety and health compliance. General contractors are recognized for having high levels of site control and moderate levels of task expertise, safety expertise, worker interaction, and aggregate ability to address the root causes of occupational injury and illness (Toole, 2002).

The senior stakeholders have access to the greatest resources available to meet capital, personnel, equipment, and training needs. General contractors are responsible for the overall coordination of construction projects. They are in charge of hiring personnel, managing subcontractors, ordering materials and equipment, obtaining permits and licenses, managing liabilities, and keeping the project on schedule while meeting budgets (Indeed, 2023; The Contractor, 2021). They must be excellent planners, communicators, and managers with clear, attainable goals and objectives to keep on task and achieve deadlines and milestones, ensuring profitability. The final and most important skill is to practice ongoing evaluation and measurement of the work process for efficiency, progress toward goals, effective use of resources, and assurance of deliverables as contracted and agreed upon, in addition to effective safety and health compliance (Gilkey et al., 2003). OSHA has published their interpretations of the role of the general contractor on a multiemployer worksite and concluded that they are a controlling party and required to assure the compliance of all subcontractors with occupational safety and health laws (OSHA, 2012). The GC is likely to be cited for violations of subcontractors (Nygren, Jakobsson, Andersson, and Johansson, 2017).

4. ESG IN CONSTRUCTION

Buildings consume 40% of human-produced energy, 25% of potable water, and emit 30% of greenhouse gases (Assef and Mangold, 2022). The construction industry must focus on sustainability, durability, resilience, energy efficiency, waste reduction, and water conservation (Assef and Mangold, 2022). CSR and SR have become ever more important to all industries, including construction. Using ESG as economic indicators of performance, companies can measure progress toward achieving sustainable goals, long-term growth, and prosperity (Henriksson, Livnat, Pfeifer, and Stumpp, 2019;

Kocmanova and Doceklova, 2012). ESG actions facilitate and support ethical business operations, allowing companies to communicate sustainability practices to stakeholders, ensure compliance with environmental, health, and safety laws, and reduce risks and liabilities while maintaining and building their reputation and competitive advantage (Glass, 2012). The United Nations Sustainable Goals number three and eight address health and well-being and decent work for all (UN, 2023).

Effective approaches to CSR and ESG reporting include managing safety on job sites and projects in addition to waste production and carbon emissions (Kim and Chang, 2022). For example, the Hyundai Construction Company made an effort to adopt smart safety technologies to enhance communication using the newest ICTs within the company at the same time they invested in green energy technologies (Hyundai Engineering & Construction, 2020). It was reported that European construction companies moved forward faster toward SR than other regions, with 90% of companies participating, followed by 83% of Japanese companies, and 50% of Australian companies reporting, while only 35% of US companies practice SR (Glass, 2012). The movement toward SR has also been slow in Malaysia (Siew, 2017). It was reported among 120 companies (42 construction and 78 property) that no construction companies were providing SR as of 2017, and only 3.3% of property companies in Malaysia did participate in SR (Siew, 2017). Key expectations for SR relate to governance, stakeholder engagement, disclosure, performance, and reporting of material data.

Barriers to SR in construction have been identified and include a lack of a consistent and coherent approach, a lack of common definitions, measures, and consensus on reporting indicators, a lack of a clear process for establishing materiality and stakeholder engagement, the use of the concepts of sustainability in varied ways, and the need for greater awareness within the industry for SR (Glass, 2012). Despite barriers, companies in the UK used key performance indicators (KPIs) of community engagement, ethical practice, health and safety performance, environmental actions, carbon emission and savings, resource management, supply chain, and workforce (Glass, 2012). Recommendations to grow ESG and SR in construction must include support from trade associations and governing bodies. Tools to help companies effectively understand what can be reported, methods to capture data, and templates for reporting (Glass, 2012).

5. B-CORPORATIONS

The B-Corporation came into existence in 2006 and was first certified as a corporation in 2007 (Foley, 2019). There will be over 6,000 certified corporations globally in 2023 (B-Lab, 2023a). The intent of seeking certification was to broaden the perceived value of corporate behavior by expanding their commitment to not only stockholders but their employees as well, local communities, and the environment (Kim et al., 2016). The B-corporation model embodies ESG, CSR and OSH. The movement provided companies with an opportunity to simultaneously "stand out" and fit into" the business landscape. Making a commitment to social and planetary needs was a means to be different from C-Corporations by serving society, making the world a better place, and moving toward sustainability (Gehman and Grimes, 2017).

The B-corporation represents a company with a mission and values to practice stewardship of Mother Earth and, in doing so, be branded unique because of their contextual distinctiveness, thus having a competitive edge (Gehman and Grimes, 2017). In 2015, the United Nations adopted sustainable goals that aim to foster responsible business practices (Brown, 2017). Becoming a B-corporation is a path to corporate responsibility and a new paradigm for doing business. The B-corporations are actively demonstrating that ethical behavior is profitable and good business (Winkler et al., 2019). The B-

Corporation community has grown dramatically, creating a thriving business community of members (Tabares, 2021).

The construction industry has been slow to adopt ESG and CSR best practices compared to other industries (Glass, 2012; Kim and Chang, 2022). There appear to be continuing arguments against adopting ESG practices, sustainable financing, and reporting for fear that profits would be adversely impacted (Kim and Chang, 2022). Chandos Construction Company is proving that being a B-Corporation is good for business and profitable on all levels. The Canadian-based company is recognized as one of North America's most innovative and collaborative general contractors (B-Lab, 2023b). Chandos Construction is the first large commercial general contractor company to be certified as a B-corporation and has become a leading champion of efficiency, cost savings, and innovative collaboration to enhance the working experience of all stakeholders (B-Lab, 2023b). Their best practices have led to recognition as a great company for the workers. The employee-owned corporation has > 700 employees that are committed to inclusiveness, collaboration, innovation, and being courageous; no job is too complex (B-Lab, 2023b). Their business model was built on lean principles, eliminating waste. Their commitment to continuous improvement has made them a force to be reckoned with and a great collaborator.

6. LEGAL TUG OF WAR

The responsibilities of the GC have been at the center of legal debates for decades (Gonzales and White, 2008; Kagerer and Garcia, 2005). The multiemployer worksite rules and regulations were established by the OSH Act in 1971 and evolved over time (Marx, 1978; Schumacher, 2017). In the beginning, interpretations and OSHA-issued citations were based on 29 CFR 1910.12(a), which required employers to protect their employees and focused on who created or exposed the workers to the hazard. Over time, changes in citations stemmed from new interpretations by the Secretary of Labor, Administrative Law Judges, and various Appellate Courts (Schumacher, 2017). A significant change was made in 1976 when the Secretary of Labor issued an updated interpretation of the doctrine to include the controlling party. The result was an expansion of citations that included those who were not only the party that created hazards or exposed workers to hazards but also those who were a controlling party on the worksite, such as the GC (Kagerer and Garcia, 2005; Schumacher, 2017). The GC has been interpreted as a controlling party and thus has a duty of care and liability (Ivensky, 2015a, b). "Control-generated duty may be retained intentionally as a conscious business decision or unintentionally, without complete understanding or related liability implications, and effective to minimize the risk" (Ivensky, 2015, p. 45); see Figures 2 and 3.

The changes in interpretation led to increased liability for the GC, which could have resulted in OSHA citations, legal claims, lawsuits, regulatory fines, lost business opportunities, and even criminal prosecutions for not exercising the proper duty of care associated with subcontractors (Ivensky, 2015a, b). Another interpretation in the early 1990s by the Secretary of Labor added the "correcting employer" to the list of responsible parties that were obligated to protect workers, further implicating the GC. The GC should be correcting the hazards recognized on their site. The Occupational Safety and Health Review Commission held the opinion that an employer that had control also has a responsibility to prevent hazards and correct hazards, even if the workers exposed were those of other employers (Schumacher, 2017). This applies to the multiemployer worksite because it is a "common" worksite where many subcontractors are engaged in operations. The duty of the GC extends to the entire site. The GC has been held responsible because of their critical role in generally supervising, coordinating, and controlling the worksite (Schumacher, 2017). The GC is likely to be cited by OSHA for violations

that he or she could have reasonably prevented, detected, and corrected. Under the Construction Safety Act, the GC is interpreted as the employer by way of the contractual agreement between he or she and the subcontractors, unless explicitly excluded. While there remains debate and varied rulings, it is prudent for the GC to manage safety and health in their projects (Schumacher, 2017).

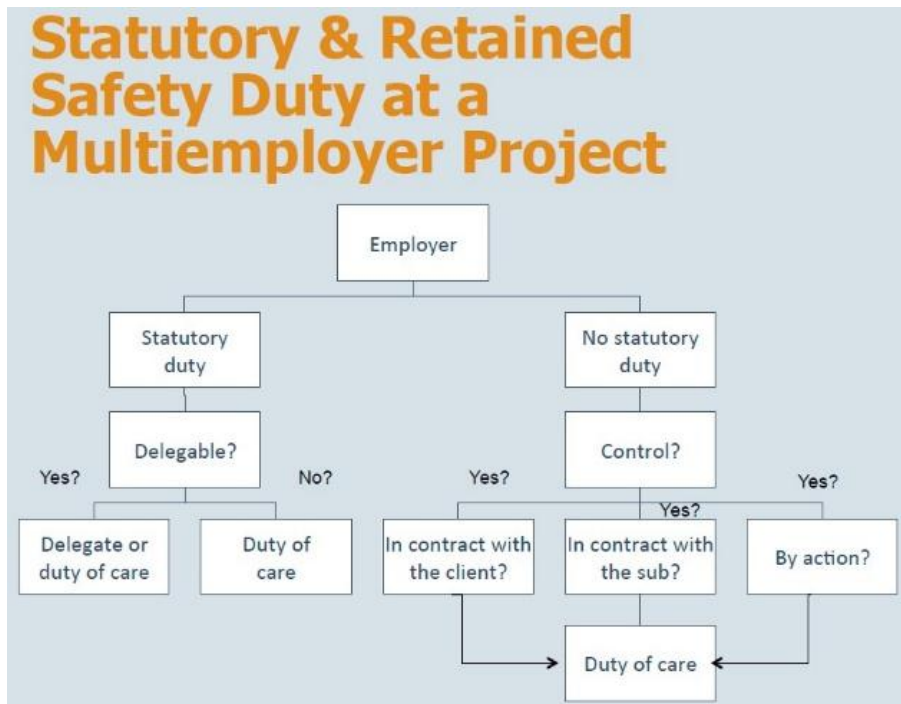


Figure 2. Intentional Statutory Duty on the Multiemployer Worksite (Ivensky, 2015b, page 46)

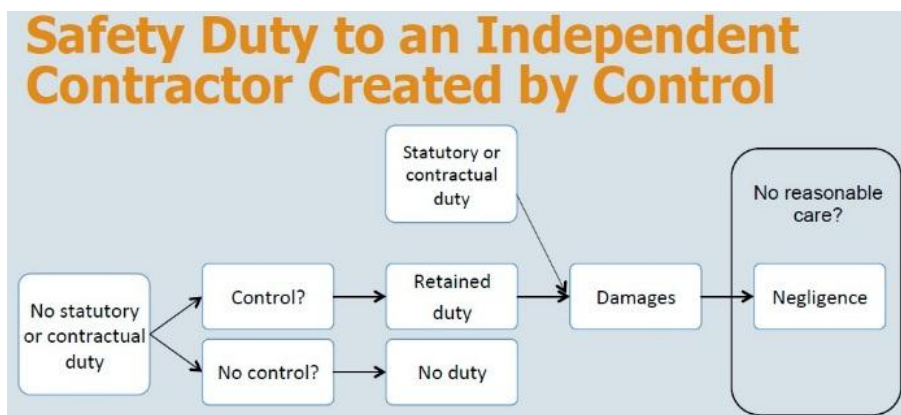


Figure 3. Unintentional Statutory Duty on the Multiemployer Worksite (Ivensky, 2015b, p 46)

7. BEST PRACTICES

Approaches to engaging ESG and managing safety and health on the multiemployer construction worksite range widely from well-structured, centralized coordination to absolute delegation. There remains some disagreement among design engineers, GCs, and subcontractors on the responsibilities of safety and health on the multiemployer construction work site. Best practices of GCs include diligent supervision of the entire project, coordination of all parties onsite, systematic screening of all subcontractors, reviewing loss histories, and OSH performance. It is important for the GC to review the subcontractor's Experience Modification Factor (ExMod) for levels above 1.0 that represent poor OSH management and greater losses than the industry average (Nelson, 2001). Companies with ExMods lower than 1 have good OSH management practices, losses lower than the industry average, and reduced workers' compensation premiums.

The GC should also review the company's safety and health program for completeness and compliance to OSH rules, regulations, and laws. In addition, the general contractor should provide a site orientation meeting for all subcontractors and require compliance with all OSH laws and standards. To ensure safe working conditions and practices, ongoing audits must confirm compliance at all project phases. If subcontractors are found to be out of compliance, a penalty should be levied to incentivize compliance with all OSH laws and standards. If a pattern of noncompliance is seen, the subcontractor should be released from the job site and the contract cancelled.

The GC should fulfill the following responsibilities (Burg, 2014):

- Assure the contractor has site-specific safety rules for each task.
- Assure that the site-specific safety rules are communicated to all parties.
- Assure reasonable monitoring of the contractor to ensure certain rules are being followed, and
- Assure that enforcement action will be taken if rules are not being followed.

The GC should also fulfill the following responsibilities (The Constructor, 2021, p. 1):

- Plan important project development and implementation in advance.
- Determination and estimation of various issues in the project, such as needed materials, equipment.
- Anticipation of any potential modification to the project.
- Making sure that health and safety specifications are followed.
- Practicing excellent communication between all parties involved in the construction project, such as the client and subcontractors.
- Determine legal and regulatory requirements.

The general contractor is key to developing coordinated action plans that relate to both ESG and OSH. The concept of project-based ESG has been promoted (Kim and Chang, 2022).

Manu, Ankrah, Proverbs, and Suresh (2013) suggest best practices that include limiting the number of subcontractors on site, selecting and working with a list of familiar subcontractors with good safety and health records, implementing an incentive program that supports safe work practices, and insisting that non-working subcontractor foremen are taking responsibility for safety and health among their crews. They also recommend OSH training and orientation for all subcontractors, cooperation and communication between subcontractors, and periodic consultation and audits of subcontractors to assure competence and compliance with site safety rules.

The emergence of ISO standards 14001 (ISO, 2023a) and 45001-2018 (ISO, 2023b) has established management systems for addressing internal and external factors, both environmental and OSH-related practices associated with workplace conditions, safe work practices and operations, hazard identification, hazard mitigation or abatement, and OSH training for employees (ISO, 2023a and 2023b). More than 300,000 companies in 171 countries are now ISO 14000 certified, and over 16,000 companies in 80 countries are ISO 45001-2018 certified. Both ISO standards are data-driven and built on continuous improvement models.

A number of organizations have developed over the years to work with companies that embrace ESG, CSR, and SR. This has resulted in several approaches to practice and reporting. A long-term sustainability assessment method is BREEAM (Assef and Mangold, 2022). BREEAM was established in 1990 and offers a holistic approach to ESG (BREEAM, 2023). They are a world leader in science-based validation and certification of the sustainable built environment. Millions of buildings around the world are registered with BREEAM and working toward ESG, health, and net zero carbon emissions (BREEAM, 2023). BREEAM has published technical standards for new construction, refurbishment and fit-out, in-use communities, and infrastructure. They advocate solutions such as net zero carbon emissions, whole-life performance of buildings, health and social impacts, circularity and resilience, biodiversity, and disclosures through reporting. For example, circularity and resilience are measured by the selection of durable designs built for resilience and longevity. BREEAM also incorporates the EU Taxonomy for Sustainability, which include actions taken to address objectives aimed at reducing climate change and supporting sustainability, such as reduced energy consumption, lower carbon emissions, health and wellbeing, reduced water consumption and pollution, materials used to build environments, and resulting waste streams. A major objective is to reduce climate change. BREEAM will estimate your percentage of taxonomy compliance (BREEAM, 2023).

Another resource organization available to help any construction company move toward ESG is the International Well Building Institute (IWBI) through the WELL Building Standards™ 1 & 2 (WELL) (IWBI, 2023). WELL provides a roadmap to sustainability by applying the science of physical and social environments to benefit humanity. The WELL Building Standards™ aims to improve the physical, psychological, and emotional experience of occupants while building a culture of health and well-being in construction. Their strategies advance the human experience through well-thought-out, intentional design and operational protocols based on scientific understandings (IWBI, 2023). The WELL standards provide metrics for evaluating wellness, safety, accessibility, performance, equity, and community, leading to certification. The IWBU provides templates, tools, and resources for company success, including knowledge, articles, education, stakeholder templates, directories, certification scorecards, and application guidance for WELL, LEED, and BREEAM certifications.

The LEED certification has established itself as a premier standard in energy and environmental design, with more than 100,000 certified buildings in 190 countries (Green Building Council, 2023). LEED-certified buildings may fall into one of four categories based on features and performance: Platinum (highest), Gold, Silver, or Certified (lowest) based on point ratings. LEED-certified buildings save money because of their energy efficiency, low carbon emissions, and overall healthier environments for occupants (Green Building Council, 2023). LEED provides assistance to companies seeking certification through an integrative process using a credit library that provides ratings or scores for a number of items, including the neighborhood development plan, land protection, equitable development, surrounding density and diversity, access to public transportation, bicycle accommodation, electric vehicle use, pollution prevention, construction activity, site assessment, habitat, open space, rainwater management, heat island reduction, water use reductions, thermal controls, energy use, and performance (Green Building Council, 2023).

One additional organization is Green Globes, which offers certification for sustainable tourism (Green Globes, 2023). Their 30-year history has made them a leading certifying organization in travel and tourism. Using sustainable criteria, Green Globes certifies three levels: Platinum (highest), Gold, and Certified Member (lowest). Sustainable criteria include four general areas: sustainable management, social and economic, cultural heritage, and environmental (Green Globes, 2023). Documentation of a sustainable management system or plan must identify the long-term commitment and practice, environmental, sociocultural, quality, health, and safety factors. Management must also document compliance with all labor laws, including the health and safety of workers and tourists. The social and economic domain includes documentation of active support for infrastructure, local community development, education, health, and sanitation; fair trade; local employment; equitable hiring; employee protection; access to basic services; and a policy that prohibits bribery and corruption (Green Globes, 2023). Cultural heritage documentation must include evidence of respect for cultures and historical artifacts and sites, a code of behavior that complements the heritage of the site, and the preservation and protection of historical artifacts and sites. The environmental domain includes documentation of items such as the purchasing of sustainable building materials and other goods, energy consumption, water consumption, food and beverage management, purchasing, and consumption, pollution prevention (3 Rs: Reduce, Reuse, and Recycle), greenhouse gas emissions, wastewater, waste management plans, non-toxic or low-toxic chemicals, biodiversity, landscaping, and wildlife protection (Green Globes, 2023).

8. CONCLUSIONS

ESG and OSH are on the move! The challenges of climate change, increasing global population, forever chemicals, high levels of air pollution, increasing wildfire smoke, water degradation, food scarcity, emerging disease, the recent pandemic, and the global burden of work-related injury, illness, and fatalities have made it ever more important for companies and individuals to embrace ESG and participate in SR. The built environment is a major source of carbon emissions and energy consumption. The construction industry in the US and around the world must embrace sustainability, green building methods, and effective OSH. The multiemployer worksite challenges the sustainability model and the safety and health of workers. There is an essential need for central coordination, management, and promotion of ESG and OSH. The GC is critical to the success of ESG and OSH in construction if we are to achieve sustainability and protect the health and wellbeing of workers.

The UN goals for sustainability provide the framework and path for human existence into the next millennia. The multiemployer worksite is fragmented and sabotages the collective efforts of the many participants in construction. We've seen the growth of organizations committed to ESG, CSR, SI, and OSH. We've seen an increase in organizations committed to assisting companies in their transformation to become better environmental citizens, such as BREEA, IWBI-WELL, GBC, LEED, Green Globes, ISO, and others. Business and industry have experienced expanding rules, regulations, and standards that guide safe work practices to protect workers. We have also seen models for best practices in OSH such as ISO 18001. The practices of environmental citizenship, sustainability, and OSH will improve the triple bottom line and make the world a better place.

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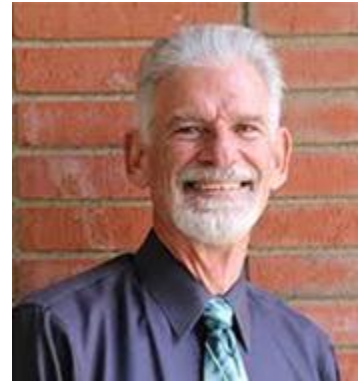
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