

ESG in Construction Law:

Evaluating Sustainable Practices in the UK Construction and Legal Industries



Report of the Bartlett School of Sustainable Construction survey on ESG practices, arrangements and implementation in the UK construction and legal industries // Supported by the Society of Construction Law

Bartlett School of Sustainable Construction

December 2024

Authors: Armando Castro¹ and Mohamad El Daouk²

Research and report team: Dr Armando Castro and Mohamad Fl Daouk

Citation: Castro, A. and El Daouk, M. (2024).

ESG in Construction Law: Evaluating Sustainable Practices in the UK Construction and Legal Industries.

London: Bartlett School of Sustainable Construction, UCL.

doi: 10.14324/000.rp.10200814.

Survey design team:

Dr Armando Castro, Mohamad El Daouk and Dr Antoine Vernet

We would like to thank Dr Antoine Vernet for setting up the survey, Emilio Lazarte for analysing the data reliability, and the SCL for their support.

¹Director of the Centre for Sustainable Governance and Law in the Built Environment and Associate Professor, Bartlett School of Sustainable Construction, University College London, 1–19 Torrington Place, London, United Kingdom. a.castro@ucl.ac.uk. <u>UCL Profile</u>.

²Lecturer in Construction Law, Bartlett School of Sustainable Construction, University College London, 1–19 Torrington Place, London, United Kingdom. **m.daouk@ucl.ac.uk**. <u>UCL Profile</u>.

ESG in Construction Law:

Evaluating Sustainable Practices in the UK Construction and Legal Industries

Supported by:





The construction industry constitutes a critical pillar of the UK economy, contributing approximately 7% of total GDP, hundreds of billions of pounds annually and providing employment to over two million professionals, roughly 9% of the work force (RICS, 2022). However, despite the UK Government (2013) calling, in its Construction 2025 report, for a more rigorous commitment to sustainability, aimed at embedding sustainable practices within the sector, the construction industry continues to fall short of societal expectations while also having faced major health and safety tragedies during the same period.

Over a decade later, the urgency for transformative action has only intensified: now, there are industry and social expectations and debates regarding how environmental, social, and governance (ESG) factors can or should be incorporated within the industry.

On the eve of 2025, this report attempts to understand and analyse the views of construction law professionals on ESG from a survey conducted by the authors with the members of the Society of Construction Law (SCL).

Ultimately, it reflects the need for more ESG initiatives for construction practitioner members of the SCL and the wider society.

Keywords: ESG, sustainability, construction industry, construction law.

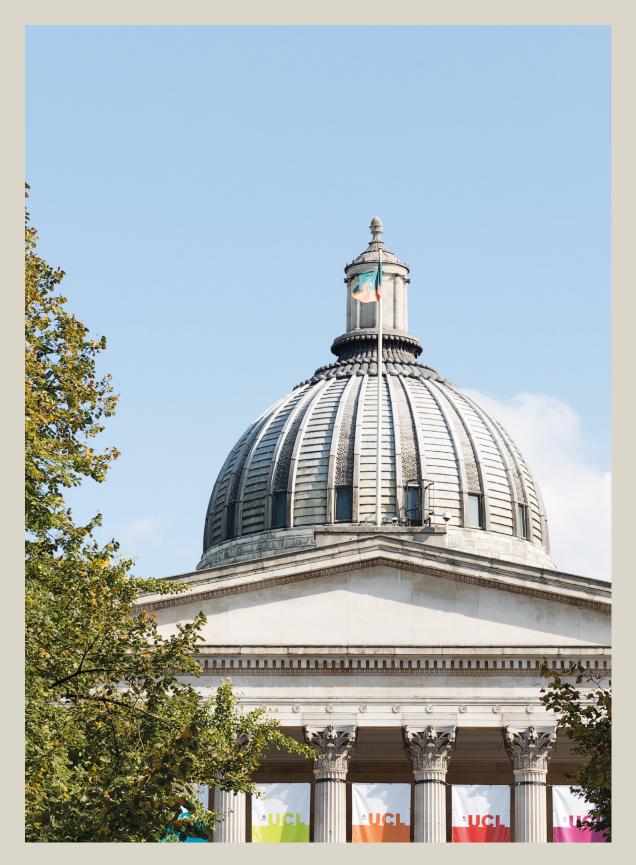


Image credit: Mary Hinkley // UCL Educational Media

Overview

In September 2024, the Bartlett School of Sustainable Construction initiated a survey titled: *ESG in Construction Law Survey*.

The survey was circulated to members of the UK SCL, a membership comprising primarily construction and legal practitioners.

The following report shares the results of this survey and offers additional critical analysis of the results.

It therefore provides an insight into the understanding of construction and legal practitioner perceptions on ESG versus the growing academic literature on the theme of the built environment.

The statistics – overpage – are key takeaways.

Survey overview

203³ participants took part in the survey. Participants were predominantly male, highly experienced, and educated to postgraduate level.

Key Insights

Industry Perceptions

71% of the respondents believe that the legal industry prioritises governance. **47%** of the construction industry focuses on environmental aspects.

Engagement Gap

Only 28% of respondents have active ESG roles.

Yet, **54%** consider ESG moderately to extremely important.

Training Needs

47% of the respondents expressed a desire for more training programmes.

100% of younger respondents (18–24 years) lacked ESG training.

48% of the respondents aged between 45 and 54 years had ESG training. Participants had a preference for practical, industry-specific certifications over theoretical approaches.

³²⁰³ participants answered from 50% to 100% of the survey; 145 participants answered 100% of the survey.

Recommendations

Encourage construction trade bodies and universities to collaborate on creating accredited training, standardised certification, and policy guidance.

Enhance access to ESG training across demographics.

Establish standardised metrics and tools for ESG in the built environment.

Integrate all the elements in ESG: "E", the "S", and the "G".

Undertake more rigorous and accessible academic and policy related research on the theme of ESG in the built environment for practitioners.



Image credit: CHUNYIP WONG // iStockphoto.com

Introduction

Environmental, Social, and Governance (ESG) considerations are reshaping industries and have gained unparalleled momentum in recent years, particularly in the construction industry.

This report has been written following the survey conducted among members of the UK SCL between September and October 2024, and designed and analysed by the authors of this report.

The survey's purpose was to gather construction and legal professionals' views on ESG considerations, influence, and development in the construction and legal industries. Therefore, the survey results provide a snapshot of SCL members' current understanding of, and views on, ESG in construction law.

This report analyses survey data alongside academic literature to explore ESG integration within the legal and construction industries, identifying gaps and opportunities for advancing sustainable practices.

The overall purpose of the report is to share these results and foster debate on how ESG principles can be developed further to achieve tangible ESG performance frameworks that drive sustainable progress in both industries.

WHY THIS SURVEY IS IMPORTANT

The UK construction and legal industries are uniquely positioned to address the challenges posed by ESG. The UK construction industry, responsible for significant environmental impacts, faces mounting pressures to decarbonise, adopt sustainable materials (HCEAC, 2022), and enhance social governance in labour and health and safety practices (Smyth et al., 2019). In tandem, the UK legal sector plays an instrumental role in shaping ESG policies, with organisations such as the Chancery Lane Project, helping draft voluntary yet enforceable "green" contracts. The Corporate Sustainability Due Diligence Directive (CSDDD), which will soon be implemented in the European Union, will also impact British supply chain networks. This survey thus provides valuable insights into how ESG priorities are perceived, implemented, and measured in the construction and legal industries in the UK, highlighting opportunities for standardisation and prudential decision-making.

HOW THIS SURVEY IS UNIQUE AND CONTRIBUTES TO THE ACADEMIC DEBATE

This survey makes a distinct contribution to the current ESG debate by focusing specifically on construction and legal professionals and collecting data using a "bottom-up approach". Unlike other ESG studies, which tend to focus on either the financial sector or a generic pool of the population of professionals, this research draws on the perspectives of SCL members, whose professional expertise bridges these two critical industries. Therefore, the unique insights from this targeted sample provide a granular understanding of how ESG is operationalised by construction, legal and project practitioners (collectively: 'project practitioners'). It also helps to address critical questions such as the integration of sustainability and ESG clauses in contracts, the role of governance in construction project management, and the real industry challenges of measuring ESG impact and performance. The findings from the survey, therefore, will also enrich academic discussions by offering empirical evidence and reflections on the theme.

WHY IT WAS IMPORTANT TO CONDUCT THE SURVEY WITH SCL MEMBERS

The Society of Construction Law is an ideal forum for this survey because its membership represents a blend of legal professionals, construction experts, project specialists, and policy influencers. The combined weight of the membership can directly influence and impact both the legal and construction industries (Egan, 1998). The members of the SCL are also placed in critical ESG touchpoints and will be drafting sustainability-focused legal contracts, implementing governance frameworks on construction sites, and managing the ESG risks of the supply chain. Therefore, SCL members are uniquely qualified to provide actionable insights that go beyond theoretical considerations due to their multidisciplinary outlook, leadership, and decisionmaking. By surveying this group, the following report captures a nuanced perspective that reflects both the legal frameworks that underpin ESG initiatives and the operational realities of construction projects.

WHY THE LEGAL AND CONSTRUCTION SECTORS ARE CRITICAL TO ESG

The legal and construction industries are equally focal to ESG success, albeit in different but complementary ways. The construction sector is a significant contributor to global carbon emissions and has a profound impact on the socioeconomic fabric of society. Addressing issues of such scale requires a solid legal foundation to ensure ESG enforceability, accountability, and congruity. In that light and in the context of construction law and building control, the legal sector serves as the backbone for embedding ESG principles into the law (via contract, statute, and police regulation), while the construction sector is the muscle that effectively operates this framework. Examining the intersection of these sectors can provide fundamental solutions that can lead to standardised approaches to ESG that can be scaled across other related industries.

Overview of Current Academic and Professional Built Environment ESG Focused Publications

UK CONSTRUCTION INDUSTRY

Historically, the construction industry has been slow to adopt ESG principles, often operating within a reactive compliance framework rather than embracing a proactive, dynamic model. This entrenched compliance mentality has exacerbated the industry's environmental impact, with construction activities accounting for nearly 40% of global carbon dioxide emissions (RICS, 2022) and affected its ability to tackle problems holistically (Adewumi, Opoku, and Dangana, 2024). The critical need for change is further amplified by heightened awareness of climate change and the imperative for the development of more sustainable practices in the industry.

Despite increasing recognition of ESG's significance, there have been debates on how to develop robust methodologies to effectively track and measure ESG performance in companies (Berg, Koelbel, and Rigobon, 2022), and the construction industry is no exception (Richardson, 2021). ESG-linked financial resources have increased over the years, and already in 2019, almost 1 trillion dollars of assets were held in sustainable funds (OECD, 2020). ESG-related funds are also becoming an important way to fund projects in an industry known for cash flow issues, delays and costs (El Daouk, 2022). Funders, investors, and stakeholders increasingly demand greater transparency and accountability in ESG reporting (Low, Montella, and Schaafsma, 2023). Failure to meet these demands risks the construction industry alienating vital sources of funding, reputational damage and even investigations into concerns of greenwashing (FCA, 2024) that may lead to fines. Therefore, without meaningful ESG integration, the flow of ESG-linked capital might be reduced or even cut from the construction industry. In essence, the abundance of ESG-linked capital could become

hostage to fortune if the construction industry continues to adopt a reactive stance toward ESG.

HISTORICAL OVERVIEW OF SUSTAINABILITY IN ESG AND THE UK CONSTRUCTION INDUSTRY

ESG emerged initially as a concept in the 1990s as a response to investor pressures to understand the exposure of their portfolios to environmental risks and later developed to encompass social and governance issues (Castro and Gradillas, 2022). ESG is connected to the wider sustainability and corporate social responsibility (CSR) movements from the late twentieth century. For example, the Brundtland Report, published by the United Nations (1987), introduced the most adopted definition of sustainable development: development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

The UK started implementing sustainability-related policies in the early 1990s. Sustainable Development: the UK Strategy (1994) and Construction Industry Key Performance Indicators (1998) were the first attempts to embed sustainable development within the construction industry and beyond. A series of policy papers published by HM Government (1998, 1999, 2004, 2005) on the theme followed. These initiatives laid the groundwork for the UK's Shared Framework for Sustainable Development (2005), introducing metrics for environmental and social performance. From there, UK legislative reform began picking up the ESG theme, among others. For example, section 172 of the Companies Act 2006 introduced ESGassociated disclosures on their environmental impact. social policies, and employees' inter-firm relational dynamics (Silk et al., 2022).

The Climate Change Act 2008 set legally binding targets for reducing greenhouse gas emissions by 100% from 1990 levels by 2050, establishing a Climate Change Committee to guide and oversee progress towards that target and promoting policy alignment (Pleake, Plumpton, and Dhaliwal, 2023). In 2013, the UK Government's *Construction 2025 Strategy* outlined a vision for the construction industry by 2025 (Olson, Summerell, and Macauley, 2021), vowing to cut front- and back-end construction costs by 33%, project delivery time by 50%, import-export building material trade gaps by 50%, and greenhouse gas emissions by 50%.



Image credit: AleksandarGeorgiev // iStockphoto.com

Problem Statement

CURRENT STATE OF ESG IN THE UK CONSTRUCTION INDUSTRY

As of December 2024, the UK construction industry has yet to meet its targets, although there has been some voluntary adoption of standards in the construction and wider real estate industry (Gradillas, Castro, and Salandra, 2021) and climate pledges by corporations (Castro and Daouk, 2023). Yet, there have been impediments to the practical delivery of this agenda, such as the shortage of skills, which in turn hinders productivity and prudent environmental decision-making (Maqbool et al., 2023). Other challenges that persist are a lack of standardised ESG metrics, limited ESG-specific workforce training, and barriers to technology adoption for smaller firms. Addressing these gaps is critical to fully embedding ESG across the sector (Misopoulos et al., 2019; Castro and Jones, 2023).

DETACHED INFERENCES IN THE ACADEMIC LITERATURE

The current published reports and articles present inconsistent findings regarding the implementation of ESG policies in the construction and legal industries. For instance, Pan, Gibb, and Dainty (2007) expected that methods such as offsite manufacturing would assist the progression of the UK construction industry. Magbool et al. (2023) expressed confidence in offsite manufacturing and other "modern" methods of construction despite their failure to help the UK construction industry achieve its Construction 2025 Strategy targets. Therefore, as of December 2024, this report recognises that a grassroots, bottomup approach is essential for effective ESG policy consideration and implementation. This approach should equally emphasise environmental, social, and governance considerations as well as engage the younger generation of incoming project practitioners. This shift prompts a critical question: what are the key missing elements preventing the construction industry from fully integrating ESG considerations?

KEY IMPEDIMENTS TO FULL ESG ADOPTION

Research points towards the absence of unified ESG reporting frameworks (Adewumi, Opoku, and Dangana, 2024). This absence creates inconsistencies, making it difficult for investors and stakeholders to evaluate company performance reliably (Aziz and Alshdaifat, 2024). In tandem, a lack of accredited verification systems and external audits exacerbates these challenges further (Wangel et al., 2016). In turn, this makes it easier for construction firms to undertake greenwashing practices, exaggerating their ESG credentials (ICLG, 2022). Without any accredited and collective means to verify, discredit, or prosecute such offenders, confidence in the UK construction industry will be undermined, leading to misallocated resources and investments.

Finally, the lack of diversity among decision-makers limits the different perspectives that can be essential for driving comprehensive ESG agendas. Age diversity on boards is linked to varied cognitive approaches and broader stakeholder considerations, which can improve sustainable decision-making (Martínez-Ferrero, 2020). Women in leadership roles, for example, have been associated with enhanced disclosure and a stronger focus on ethical and social dimensions in organisations, which enable balanced ESG reporting (Wasiuzzaman and Subramaniam, 2023). In the UK construction and legal sectors, the underlying age and gender disparities are resulting in higher attrition rates among women and younger employees. This is primarily due to inequitable practices and a lack of inclusivity, which hinders the construction and legal industries' ability to meet ESG goals and improve further (Shrestha, 2020).

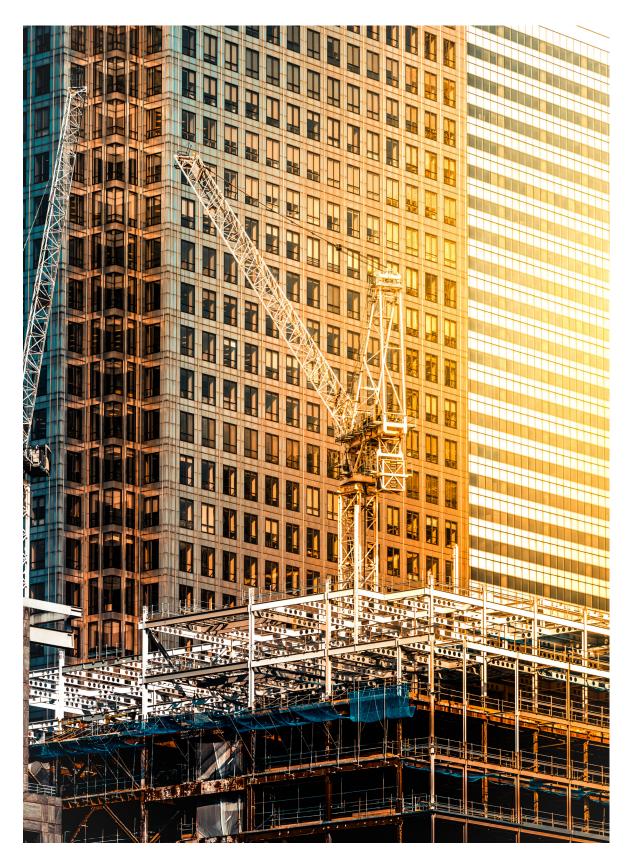


Image credit: CHUNYIP WONG // iStockphoto.com

Results - Key Findings

AGE

The findings of this study highlight significant trends and disparities in ESG awareness, training participation, and prioritisation across various demographics, industries, and professions. Older age groups in the sample, particularly those aged 45–54 and 55–64, exhibit higher levels of ESG training participation, likely reflective of their seniority and access to professional development opportunities. However, engagement among younger professionals, particularly those aged 25–34, remains notably lower, signalling the need for targeted initiatives to foster ESG awareness at earlier career stages.

INDUSTRY

Industry-specific trends reveal that ESG engagement is more pronounced in the private sector, where training participation is significantly higher compared to the underrepresented public sector. This disparity could be due to market demands and reputational pressures to integrate ESG principles in private organisations.

PRACTITIONERS

Legal practitioners were the key participants in the survey and focused primarily on governance. However, technical and operational roles in construction, such as engineering and design, were underrepresented in the survey. This imbalance may limit the practical application of ESG principles in construction and other technical contexts.

TRAINING

Webinars are the most commonly used format, which might be due to their accessibility. However, more immersive approaches, such as workshops and seminars, remain underutilised, particularly in technical and management roles.

GENDER

Gender disparities are also apparent, with males dominating in absolute numbers but females demonstrating proportionally higher engagement in training and a stronger emphasis on governance and social priorities. Males, by contrast, show a broader interest in environmental factors but relatively limited prioritisation of social dimensions, suggesting a less balanced approach to ESG.

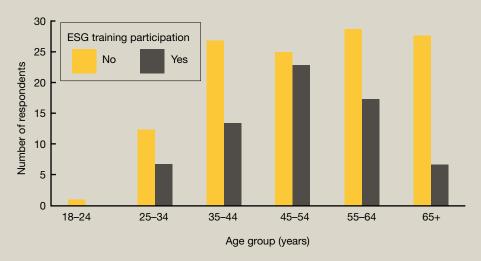
THE E, S, AND G

Environmental factors were named the most important factor by survey participants, followed by governance. When asked what they thought was the most important issue for the construction and legal industry, governance was the primary answer. Social issues received the least attention across all groups. This imbalance highlights the need to discuss and promote social issues and community engagement within ESG frameworks.

"When asked what they thought was the most important issue for the construction and legal industries, governance was the primary answer."

ESG TRAINING BY AGE GROUPS

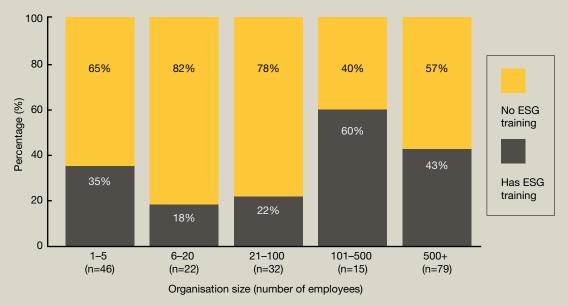
Figure 1: ESG training participation by age group. Based on 197 responses.



In the survey, there were 197 responses skewed towards professionals over the age of 35. The participation of younger respondents between the ages of 18 and 24 was extremely limited, and none of the respondents had any ESG training. Respondents between the ages of 25 and 34 showed a higher level of ESG training participation; however, it should be noted that the majority of respondents were over the age of 35. Despite the higher participation rate of respondents over the age of 35, the majority in each of these respective age groups have not participated in any ESG training. This is particularly notable in the 65+ age group. Participants in our sample emphasise the significant need for additional ESG training among practitioners in the legal and built environment communities.

ESG TRAINING IN ORGANISATIONS

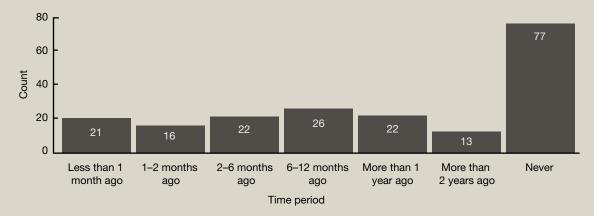
Figure 2: ESG training participation by organisation size. Based on 194 responses.



The majority of respondents to the survey come from large organisations of over 500 employees. The second most represented group is small organisations consisting of 5 or fewer employees. There is a more even spread of

answers in medium-to-large-sized organisations. Figure 2 highlights that respondents from organisations with fewer than 101 employees receive less ESG training or have limited access to related resources. Around half of organisations with over 101 employees offer ESG training.

Figure 3: Recent participation in ESG activities. Based on 197 responses.



A significant portion of the surveyed professionals (77 out of 197) have never participated in any ESG professional development activities. The "6–12 months ago" are the next most common time periods, with 26 occurrences, respectively. Only a small number of individuals (37) have participated in ESG professional development activities in the past 2 months. The data suggests that there is room for improvement in encouraging and supporting regular ESG-related professional development among the individuals in this dataset.

COMPARATIVE ANALYSIS OF ESG

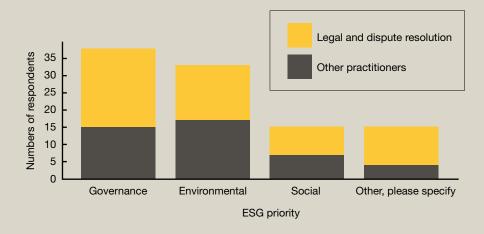
Figure 4: ESG training participation: legal and dispute resolution practitioners versus other project practitioners. Based on 197 responses.



The survey reveals that legal and dispute resolution professionals demonstrate a significantly higher level of ESG engagement compared to practitioners in other roles. They comprise the majority of the respondents, who prioritised governance as the core ESG dimension. They also exhibit the highest participation in ESG training, often favouring accessible formats such as webinars. This strong focus on governance underscores their ability to enhance organisational accountability and strategic oversight in ESG implementation.

In contrast, other project practitioners, such as those in engineering, design, and management, demonstrate a more balanced focus across ESG dimensions, including environmental and social factors. Their representation in immersive training formats, such as workshops and seminars, although limited, aligns with the practical, on-the-ground nature of their roles. However, relative underrepresentation of these professions in ESG discourse, coupled with lower overall training participation rates, constitutes a significant drawback.

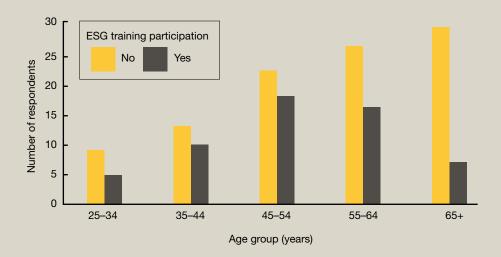
Figure 5: ESG prioritisation: legal and dispute resolution practitioners versus other project practitioners. Based on 101 responses.



Within the sample discussed in Figure 4, governance is the most prominent ESG element for legal and dispute resolution practitioners, whereas the environment is the top priority for other construction practitioners. Additionally, across this sample, the social element of ESG is the least prioritised.

GENDER ESG PARTICIPATION - ESG TRAINING IN MALE AGE GROUPS

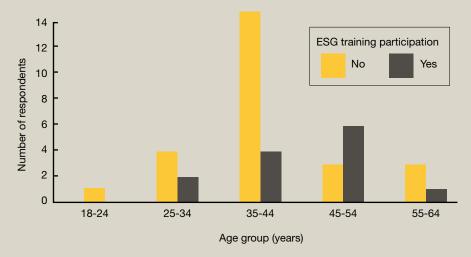
Figure 6: ESG training participation by age group (males). Based on 155 responses.



The survey indicates that male participants' engagement with ESG and participation in training peak between the ages of 45 and 64. This finding is noteworthy, as research in other industries shows engagement is higher in younger age groups, which is not reflected here. If these younger respondents do not engage in ESG training, this could become a significant age-related skills gap problem in the future.

GENDER ESG PARTICIPATION - ESG TRAINING IN FEMALE AGE GROUPS

Figure 7: ESG training participation by age group (females). Based on 39 responses.



The survey reveals that female participants demonstrate a higher proportion of ESG training compared to their male counterparts. However, female participation remains limited in both younger and older age groups, particularly among 18–24-year-olds and 55–64-year-olds. Interestingly, the majority of women in the age group of 45–54-year-olds within this sample have undergone ESG training. This aligns with the stage in their careers when professionals are more likely to have attained leadership roles.

ESG TRAINING ACTIVITIES

Figure 8: ESG activities construction trade bodies should focus on. Based on 81 responses.



The majority of survey respondents stated that construction trade bodies should focus on training and education in the near future to promote ESG awareness and principles. Many respondents identified Training, Education, and Awareness as important areas for improvement.

ADDITIONAL REFLECTIONS

The findings show that younger individuals demonstrating limited ESG training and awareness pose a risk of perpetuating this imbalance in future professional practices. This trend in the survey may indicate a systemic gap in ensuring that ESG awareness is embedded into the career development of emerging professionals, who are vital for driving long-term sustainability agendas. Furthermore, the relatively lower prioritisation of social aspects suggests a potential shortfall in addressing the broader societal implications of ESG. Empowering young professionals through targeted education and training is essential to address this gap.

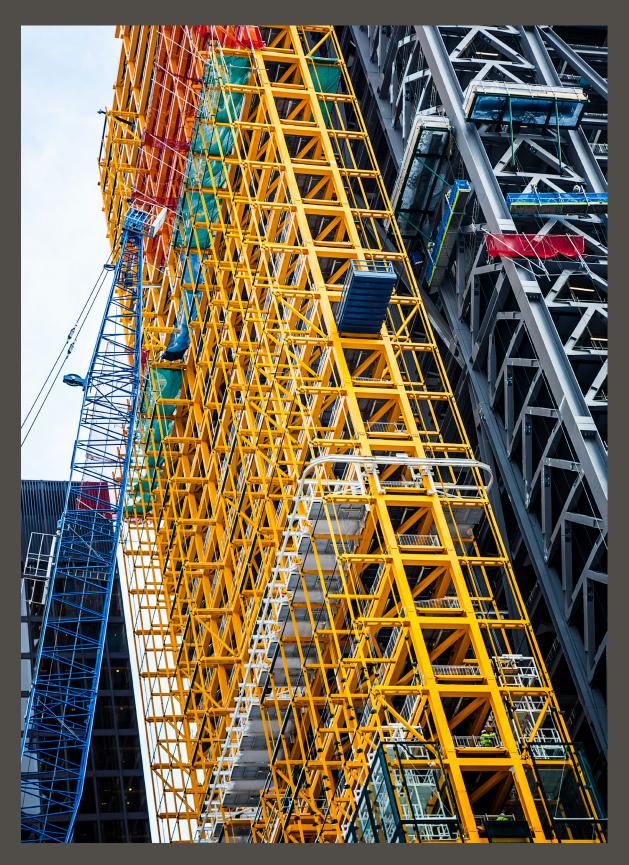


Image credit: mbbirdy // iStockphoto.com

Takeaways

The incorporation of ESG principles into the UK construction and legal industries is becoming an increasingly essential consideration for long-term sustainability. However, the age and gender gaps outlined in this report present a major obstacle to achieving tangible success. Both industries demonstrate disparities that hinder the full adoption of ESG frameworks, particularly within the "S" (social) dimension. The legal industry prioritises the governance dimension, while the construction industry prioritises the environmental dimension. The social dimension is not prioritised by either.

KEY TAKEAWAYS FROM THE REPORT

There is an overall interest in further ESG training in the built environment. On average, staff from larger organisations seem to have more ESG training. Another key takeaway is that most people who have trained have done so within the past year. However, the majority of respondents would like to receive further educational and vocational opportunities to further their ESG knowledge.

INTEGRATING YOUNG PROFESSIONALS

The report underscores several critical insights regarding ESG engagement. In the construction and legal industries, ESG training and implementation reflect a stark disparity across age groups. Professionals over 45 years of age dominate ESG training participation, likely due to their seniority and access to professional development opportunities. In addition, there are multiple alternative possibilities notwithstanding: external funder and market pressures to train, personal interest, flexibility at later stages of their respective careers etc. Conversely, younger professionals, particularly those under 34

years old, exhibit limited engagement, signalling a gap in early career exposure to sustainability concepts. Construction (and law for that matter) remains male-dominated.

CHALLENGES ADDRESSING SOCIAL FACTORS WITHIN ESG

The report highlights the limited presence of social considerations within ESG frameworks.

The governance and environmental elements receive greater attention, leaving aspects of the social element, such as: equity, workforce diversity, and community engagement, relatively neglected. This imbalance risks perpetuating inequities, particularly in construction, where gender representation and inclusivity remain critical issues. Furthermore, limited engagement with social factors hinders the industries' ability to meet evolving stakeholder expectations and regulatory demands for equitable development.



Image credit: CHUNYIP WONG // iStockphoto.com

Next Steps

DEVELOPING ESG TRAINING IN CONSTRUCTION LAW

Trade bodies such as the SCL need to address the current lack of ESG training in construction law; members demand more training. This is a challenge and also an opportunity to collaborate with universities that conduct active ESG research in the built environment and law. This would help project practitioners (legal and construction) and the wider built environment.

INCREASING ACCESS TO ESG TRAINING

Targeted initiatives are necessary to ensure equitable access to ESG training for younger professionals. Industry stakeholders, including trade bodies and universities, should prioritise early career interventions, embedding ESG principles into foundational education for construction and legal professionals. Initiatives such as ESG mentorship programmes and scholarships for underrepresented groups can bridge the gaps in participation and leadership development.

FOSTERING INTERGENERATIONAL COLLABORATION

Bridging the age gap requires fostering collaboration between younger and older professionals in the theme of ESG. Cross-generational partnerships can combine the experience and expertise of senior professionals with the innovative perspectives of younger practitioners, driving more dynamic and inclusive ESG policies.

STANDARDISING METRICS AND REPORTING

In the survey, participants were asked what ESG activities should be standardised. Most respondents emphasised standardising training, certification, and reporting. The lack of unified ESG reporting frameworks exacerbates inconsistencies and undermines stakeholder confidence. The problem of lack of standardisation was mentioned in our survey's open-ended questions. Therefore, developing standardised metrics with input from bodies such as the SCL for ESG performance, particularly for social dimensions, can enable more transparent and comparable assessments across companies and sectors.

INTEGRATION OF THE "S" ELEMENT IN ESG

Further promoting the "S" in ESG requires a holistic approach that addresses both structural and cultural barriers. Construction and legal firms should adopt policies that actively champion inclusivity, such as flexible work arrangements and anti-discrimination measures. Additionally, integrating social considerations into project planning and execution, such as engaging with local communities and supporting workforce well-being, can reinforce the societal value of these industries.

"... developing standardised metrics with input from bodies such as the SCL for ESG performance, particularly for social dimensions, can enable more transparent and comparable assessments across companies and sectors."

References

- Adewumi, A.S., Opoku, A. and Dangana, Z. (2024). 'Sustainability assessment frameworks for delivering Environmental, Social, and Governance (ESG) targets: A case of Building Research Establishment Environmental Assessment Method (BREEAM) UK New Construction', Corporate Social Responsibility and Environmental Management, 31(5), pp.3779–3791. doi: 10.1002/ csr.2768.
- Aziz, N.H.A., Alshdaifat, S. (2024). 'ESG Reporting: Impacts, Benefits and Challenges', in Alshurafat, H., Hamdan, A. and Sands, J. (eds.) Sustainable Horizons for Business, Education, and Technology. Contributions to Environmental Sciences & Innovative Business Technology. Singapore: Springer, pp.69–76. doi: 10.1007/978-981-97-2981-4_5.
- Berg, F., Koelbel, J.F. and Rigobon, R. (2022).
 'Aggregate confusion: The divergence of ESG ratings', *Review of Finance*, 26(6), pp.1315–1344.
- 4. Castro, A. and El Daouk, M. (2023). 'Climate Pledges, What Now? Brief Reflections on the Impact of Corporate Climate Pledges', Cambridge International Law Journal Blog, 17 July. Available at: https://cilj.co.uk/2023/07/17/climate-pledges-what-now-brief-reflections-on-the-impact-of-corporate-climate-pledges/ (Accessed: 25 November 2024).
- Castro, A. and Gradillas, M. (2022). 'Insights into Successful ESG Implementation in Organizations', Journal of Financial Transformation, 56, pp.168– 176.
- 6. Castro, A. and Jones, K. (2023). ESG in the real estate finance industry: Current developments and call to action. London: Bartlett School of Sustainable Construction, UCL.
- 7. Department of the Environment, Transport and the Regions. (1998). Construction Industry Key Performance Indicators 1998: Project Delivery and Company Performance. London: Her Majesty's Stationery Office.
- 8. Department of the Environment. (1994).

 Sustainable Development: The UK Strategy.

 London: Her Majesty's Stationery Office.

- Egan, J. (1998). Rethinking Construction: The Report of the Construction Task Force to the Deputy Prime Minister, John Prescott, on the Scope for Improving the Quality and Efficiency of UK Construction. London: Department of Trade and Industry.
- El Daouk, M. (2022). 'Time of the essence in Building Contracts', Journal of Legal Affairs and Dispute Resolution in Engineering and Construction, 15(2). doi: 10.1061/JLADAH.LADR-949.
- Financial Conduct Authority. (2024). FCA confirms anti-greenwashing guidance and proposes extending sustainability framework. Available at: https://www.fca.org.uk/news/press-releases/ fca-confirms-anti-greenwashing-guidance-andproposes-extending-sustainability-framework (Accessed: 25 November 2024).
- 12. Gradillas, M., Castro, A. and Salandra, R. (2021). Understanding the adoption of voluntary environmental, social and governance (ESG) standards in the real estate sector. London:

 Bartlett School of Sustainable Construction, UCL.
- Her Majesty's Government. (1994). Sustainable
 Development: the UK Strategy. London: Her
 Majesty's Stationery Office.
- 14. Her Majesty's Government. (1998). The Government's Response to the Environmental Audit Committee Report on the Greening Government Initiative. London: Her Majesty's Stationery Office. (Cm 4108).
- 15. Her Majesty's Government. (1999). A Better Quality of Life – Strategy for Sustainable Development for the United Kingdom. London: Her Majesty's Stationery Office.
- 16. Her Majesty's Government. (2005). One Future Different Paths. The UK's Shared Framework for Sustainable Development. London: Department for Environment, Food and Rural Affairs.
- Her Majesty's Government. (2005). Securing the Future: Delivering the UK Sustainable Development Strategy. London: Her Majesty's Stationery Office.

- Her Majesty's Government. (2013). Construction 2025. Available at: assets.publishing.service.gov. uk/media/5a7b7ea140f0b62826a03f2c/bis-13-955-construction-2025-industrial-strategy.pdf (Accessed: 25 September 2024).
- Her Majesty's Treasury. (2004). Sustainable
 Development Guidance for the 2004 Spending
 Review. London: Her Majesty's Stationery Office.
- House of Commons Environmental Audit
 Committee. (2022). Building to net zero: costing carbon in construction. (HC 2022–2023 103).

 London: House of Commons.
- 21. Low, J., Montella, F. and Schaafsma, E. (2023). 'Improving the construction sector's ESG credentials'. *RICS Construction Journal*. Available at: www.rics.org/uk/en/journals/constructionjournal/ESG-2023-construction-trendspredictions.html (Accessed: 20 September 2024).
- Maqbool, R., Namaghi, J., Rashi, Y. and Altuwaim, A. (2023). 'How modern methods of construction would support to meet the sustainable construction 2025 targets, the answer is still unclear', Ain Shams Engineering Journal, 14(4). doi: 10.1016/j.asej.2022.101943.
- Misopoulos, F., Manthou, V., Michaelides, Z. and Adebayo, A. (2019). 'Environmental and Social Sustainability in UK Construction Industry: A Systematic Literature Review', European Journal of Economics and Business Studies, 5(1), pp.100– 115.
- 24. OECD. (2020). 'Environmental, social and governance (ESG) investing', OECD Business and Finance Outlook 2020: Sustainable and Resilient Finance. Paris: OECD Publishing.
- 25. Olson, K., Summerell, T. and Macaulay, M. (2021). The UK's approach to climate change and how the construction industry can help achieve net zero targets: an overview. Available at: https://www.dentons.com/en/insights/articles/2021/october/29/the-uk-s-approach-to-climate-change? (Accessed: 22 November 2024).
- Pan, W., Gibb, A. and Dainty, A. (2007).
 'Perspectives of UK housebuilders on the use of offsite modern methods of construction', Construction Management and Economics, 25(2), pp.183–194. doi: 10.1080/01446190600827058.

- 27. Pleake, L., Plumpton, H. and Dhaliwal, J. (2023). Circular construction: *Building for a greener UK economy*. London: Green Alliance.
- Richardson, L. (2021). 'Growing importance of ESG reporting in the construction industry', Green Badger, 28 October. Available at: www. getgreenbadger.com/esg-reporting-in-the-construction-industry/ (Accessed: 5 October 2024).
- 29. Royal Institution of Chartered Surveyors. (2022).
 'RICS calls for industry and government to futureproof UK construction'. *RICS News & Insights*, 15 August. Available at: https://www.rics.org/news-insights/rics-calls-for-industry-and-government-to-futureproof-uk-construction (Accessed: 25 November 2024).
- Royal Institution of Chartered Surveyors. (2022).
 'Sustainability'. RICS News & Insights. Available at: www.rics.org/news-insights/current-topics-campaigns/sustainability (Accessed: 18 November 2024).
- 31. Silk, D. et al. (eds.) (2022). *Environmental, Social & Governance Law* 2022. 2nd edn. London: Global Legal Group.
- 32. Smyth, H., Roberts, A., Duryan, M., Sherratt, F., Jing, X. and Toli, A.M. (2019). Occupational health, safety and wellbeing in construction. London: Bartlett School of Construction and Project Management, UCL. Available at: https://www.ucl.ac.uk/bartlett/construction/sites/bartlett/files/occupational_health_safety_and_wellbeing_in_construction_march_2019.pdf. (Accessed: 28 November 2024).
- 33. Wangel, J., Wallhagen, M., Malmqvist, T. and Finnveden, G. (2016). 'Certification systems for sustainable neighbourhoods: What do they really certify?', *Environmental Impact Assessment Review*, 56, pp.200–213.
- 34. Wasiuzzaman, S. and Subramaniam, V. (2023). 'Board gender diversity and environmental, social and governance (ESG) disclosure: Is it different for developed and developing nations?', Corporate Social Responsibility and Environmental Management, 30(5), pp.2145–2165.
- World Commission on Environment and Development (WCED). (1987). Our Common Future. Oxford: Oxford University Press.

Notes

