



**CIOB**

The Chartered  
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# Building Up Scotland: professional insights from the construction sector in 2023

CIOB Policy & Research

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# Executive Summary

*Building Up Scotland: professional insights from the construction sector in 2023* focuses on data collected from industry professionals and suggests possible solutions and interventions to mitigate them.

Scotland's construction sector is of critical importance to the nation's economy. Not only does the industry employ nearly a quarter of a million people in Scotland and contribute billions to its economy, but it also plays a central role in achieving the Scottish Government's necessarily ambitious housing, energy, and climate change targets.

It is important, then, that the ongoing challenges being faced by the industry are understood and possible means of mitigation considered. To that end, in February 2023, CIOB conducted a roundtable discussion with professionals working in the sector in different roles throughout Scotland. During the discussion, several key challenges emerged, including the ongoing economic pressures posed by inflation and interest rates; the fragmented and short-term nature of project funding; and managing client expectations in a pressurised and uncertain environment. Further, participants outlined difficulties in recruiting and retaining staff, and pointed to the ongoing skills shortage being faced nationally. This skills gap, it was noted, is exacerbated by the complexity of Scotland's rural and island geography; getting the right people in the right places continues to prove challenging.

This report first provides a national profile of the construction sector in Scotland, outlining economic trends and major projects. Following that, key themes from the roundtable discussion are highlighted. The report concludes with policy recommendations based on the evidence collected from the industry.



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# National Profile

Scotland's construction industry employed 231,000 in 2021 (CITB, 2023). Its construction output was estimated to be above £13.3 billion in 2022 (CIOB, 2023). The public sector is a key client within the industry, spending more than £4 billion annually (Scottish Government, 2021). Glasgow City, North Lanarkshire, and West Lothian contributed the most to the total Gross Value Added (GVA) of Scotland's local authorities, at 14 %, 8.4%, and 8.3%, respectively (Scottish Government, 2022). The Construction Pipeline Forecast Tool's latest six-month data refresh, representing planned investment up to 2028, puts the value of planned public sector construction projects in Scotland at £12.2 billion (Scottish Futures Trust, 2023). The most recent figures from Scottish Government indicate that the largest subsector contributions to construction's GVA were electrical, plumbing and other construction installation activities (26%) and the construction of both residential and non-residential buildings (25%) (Scottish Government, 2022).

The construction workforce in Scotland is broadly balanced between those who live in the nation and those that work in it. But Scotland's construction industry does rely on a relatively high share of workers born outside the UK. At 9%, the non-UK-born contingent in Scotland is above the UK average (CIOB, 2023). That being said, UK-based (Scotland-registered) companies account for 75.7% of Scottish GVA and 82.6% of the nation's employment in the industry (Scottish Government, 2022).

Scotland experienced a deeper-than-average fall in workloads for the UK in 2022. New housing and infrastructure work held up relatively well among the new work sectors. Within the overall construction mix, the share of housing rose from 18% to above 22% in the period 2017 to 2022, while infrastructure expanded its share from 21% to 23%. Repair, Maintenance, and Improvement (RMI) work across all sectors saw a rise in the share of overall construction work (CIOB, 2023).

The latest Construction Industry Training Board's (CITB) Construction Skills Network 'Five Year Outlook for Scotland' report, released in January 2023, noted a "strong pick up in work" across the country in 2021 as output grew by circa 15% over the course of the year (2023, p. 7). Aligned to the findings outlined in the 'Roundtable Summary' section of this report noting the ongoing skills gap in the sector, the CITB has estimated that Scotland's construction sector will need to recruit an additional 3,910 people annually in order to meet demand and cover churn (2023, p. 11).



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# Major Projects

Scotland is home to several major energy projects, with wind power being a dominant focus. These include SSE Renewables' plans for the 4.1GW Berwick Bank offshore wind farm in the North Sea (SSE Renewables, 2023), Cerulean Winds' plans for three floating wind turbine projects (Cerulean Winds, 2023), and the 2GW West of Orkney Windfarm being developed by Macquarie's Green Investment Group, TotalEnergies, and RIDG (Green Investment Group, 2022). These projects represent a significant investment over the next decade.

Other renewable power projects, such as pumped storage hydro schemes, are also in the works, such as the Cruachan Power Station, located about 50 miles northwest of Glasgow. Additionally, there are several major redevelopment masterplans with price tags over £1 billion in the pipeline. The Orkney Islands Council Harbour Authority has developed a 20-year masterplan to transform Orkney's harbours (Orkney Harbours, 2021). Alongside partners, the City of Edinburgh Council is redeveloping formerly industrial land at Granton Waterfront (City of Edinburgh Council, n.d.). Across the city, several other regeneration projects are underway or planned, including the £500 million Edinburgh Park South residential-led scheme (HTA Design, 2023). Elsewhere in Scotland, the Lanarkshire-based, £500 million Monklands Hospital replacement project, though delayed, remains in the pipeline (NHS Lanarkshire, 2022); work is beginning on the new Dunfermline Learning Campus, part of the Scottish Government's £2 billion Learning Estate Investment Programme (Fife College, 2023); and, further north, plans to redevelop a former oil fabrication yard near the Moray Firth are progressing, which include the construction of 2,000 homes (The Planner, 2022).



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# Scotland Roundtable

To support the quantitative data gathered for this report, in February 2023, the CIOB gathered a group of practitioners covering the breadth of the Scottish construction industry, from local authority representatives to Tier One contractors to consultants and SME housebuilders to facilitate discussion about the state of play in Scotland’s construction sector. Roundtable participants are actively involved in several infrastructure projects across the country, from creating new housing in island communities to delivering education and healthcare assets across the highlands and northeast. These projects will deliver considerable community benefits as well as provide a boost to local economies, creating local jobs.

## Facing the financial facts – interest and inflation: “the market pressure is just phenomenal”

When asked about the greatest barriers to project starts, participants overwhelmingly pointed to the challenges arising from the current financial environment, highlighting the difficulty in managing ballooning costs for materials and labour as well as client expectations in light of these costs.

Across the sector, price uncertainty throughout the supply chain – for both materials and labour – poses risks to the viability and timeliness of project commencements. Roundtable participants identified difficulties relating to price fluctuation within the public and private sectors. One public sector participant noted that “the biggest hurdle for us is funding at the moment...you know, everything’s about 30% more than it was a year or two ago.” Compounding these difficulties are challenges in managing client expectations in an environment of rapidly increasing costs. It was noted that contractors are, in some cases, asked to provide pricing a year in advance to tie in with funding streams. Problems then arise when the construction phase begins, and costs skyrocket, blowing budgets and deadlines in the process and leaving contractors to go back and seek some recompense, if the contract or framework allows.



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Further, logistics and timing challenges relating to public and private funding were highlighted. Participants bemoaned the oft-uncertain and short-term nature of funding. Not only does this structure underpin the boom-and-bust nature of the industry, but it also puts pressure on the entire system. A Tier One representative noted that while contractors often don't control the funding, they are expelling energy and resources (often without fees) to assist clients. If funding is in jeopardy, clients "want to maximise our input for their future use but withhold the funding challenges." This creates pressure to assist clients without pay in the hope that projects will materialise.

Additionally, private sector representatives pointed to challenges in client-driven short mobilisation periods, often due to inflation: "Sooner is cheaper." Similarly, a Tier One representative said, "Client funding is dictating the pre-construction phase so much so that it's absolutely handcuffing any realistic design development period." Conversely, lengthy delays in obtaining statutory approvals further pressured projects, with an SME developer pointing to projects with an 18-month wait time for securing the necessary planning permission. Delays in planning, participants offered, increase the risk to contractors on design and build. It was suggested that these delays are due in part to resourcing challenges being experienced by local authorities and the knock-on effects of the Covid-19 pandemic.

Participants identified better communication as a possible resolution to some of these challenges, highlighting the importance of managing client expectations. Strong calls were made for greater clarity from public sector clients in articulating timelines for funding and projects themselves, better articulating required formats for tendering and working to ensure that all parties "understand the process, the limitations, and actually work together to reduce them...it all starts with a conversation."

Though some participants did not feel the pressure of ongoing inflation directly, there was consensus about the negative impact of rising interest rates. This is a particularly acute challenge for the public sector, where money must be borrowed in order to invest. One participant from the public sector said that, for instance, interest rates now will cost double over the lifetime of an asset, so £50 million no longer buys what it used to. As a result, there are significant changes in public sector construction: "It means we're only building one new school rather than two."

In an uncertain financial environment with both inflation and interest increases to consider, participants noted the ongoing challenges of risk pricing. Subcontractors, for instance, have to consider possible price changes over the course of a contract, which may span years. As a result, many subcontractors won't hold their pricing for any length of time, meaning "there's quite a bit of inflation built into the contract" for risk allowance. One participant noted that where risk allowance may have previously sat at 1%, "you're now looking at maybe 13% risk." The economic environment is creating many challenges for the construction sector and, as highlighted within this discussion, could mean that key infrastructure projects are delayed or even cancelled in order to manage ongoing costs. As outlined below, this uncertain fiscal climate also underpins mental health, quality and health and safety concerns.

## Recruitment: “we’ve got shortages across the board”

There was strong consensus from participants about the ongoing challenges in recruiting and retaining people for various roles within the industry, with participants providing examples of difficulty in recruiting for both graduate and more experienced positions, from onsite functions to those within consultancy and design. One participant noted that replacing someone who’d left their organisation had taken over a year.

These shortages were felt across the whole of Scotland. Interviewees noted that, particularly in the post-Covid context, talent within Scotland is being lost to international roles in the UK and beyond. One offered, “Folk are quite happy to pay me a lot of money to sit in Aberdeen for a job in central London.” It was agreed that, although the flexibility of working from home has had its advantages and can be a tool for competitive recruitment, this has increased the challenges in retaining qualified people for roles in Scotland, especially as international projects often offer higher wages without the need to travel or live abroad. This environment poses challenges for public sector recruitment, which does not have the same flexibility as private firms – large companies in particular – to offer flexible, competitive packages to the limited pool of qualified people. A public sector representative noted that they had taken active steps with a modern apprenticeship programme over the last three years to recruit young people to their organisation. They further noted that they lost one of these apprentices to a higher-paying private role after their five-year investment that included putting the student through university.



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## Closing the skills gap: “There is a serious shortage of trade skills on the ground”

Participants noted the ongoing skills gaps within the sector, with one offering that “we lost a whole generation in three-four years” due to the financial crash in 2008. One interviewee noted that “it’s actually really hard to find plumbers and electricians, and they are extremely, extremely important.”

Attracting new entrants to the sector was identified as a key barrier to closing this gap. Participants identified an ongoing challenge with the perception of the industry, which acts as a barrier to recruitment: “It’s about what the schools are telling about our industry...it’s the careers advice that they’re getting...I don’t think they give us enough credit for what we do.” A career representative with extensive experience in fostering engagement with young people further argued that it is about “making [construction] an attractive proposition as well...and showing kids that there are routes in for people at all levels as well.” It was noted that the industry is leading a number of initiatives in schools to build awareness of roles in construction from a young age and tackle some of these negative perceptions.

Participants all expressed that their organisations are interested and committed to taking on apprentices or providing training to experience recruits – investing a lot of time and money in the process – and pointed to losses to other firms or international projects as a serious risk to these investments.

In discussions about equality, diversity and inclusion within the sector, participants noted that attention must be given to recruiting a more diverse workforce, in particular looking to bring women and individuals with disabilities into the sector. It was said that this will require the industry to continue to implement processes to reduce barriers to these groups entering the field but also a commitment to developing an inclusive culture that can retain people once they have joined the industry.



Photo by Gunnar Ridderstrom on Unsplash



## Navigating Scotland's geography: "it's so difficult for islanders to get affordable housing"

There is an appetite for innovation in Scotland with private and public sector representatives highlighting ongoing initiatives within their organisation and identifying funding streams supporting these programmes. However, there were notable challenges in adopting innovative practices, such as research & design for Modern Methods of Construction (MMC). Scotland's unique geography, particularly the rural highlands and islands, makes transporting materials difficult. One participant pointed to a recent island-based housing project they'd worked on and identified challenges in relation to ongoing costs and logistics challenges in the ferry service in getting materials to site.

Similarly, undertaking projects outside Scotland's central belt is challenged by the ongoing skills gap, especially when considering MMC. Though there was consensus that MMC can be advantageous in terms of safety, quality, and cost control due to factory production, it was argued that the benefits "dilute quickly" when challenges arise in getting the people with the necessary skills in MMC to remote sites, noting that "the workforces just aren't available." Participants noted that this skills gap results in additional costs to site delivery under "per diem" or "subsistence" in the work package pricing due to working away from home, which requires hotels, travel costs, and increased food allowances, for example.



Photo by Ondrej Rafaj on Unsplash



## Quality, safety & mental health: “When it comes back to money, the first thing that goes is the people”

As highlighted above, significant financial pressure exists within the industry, requiring careful – and often problematic – decision-making to manage narrowing profit margins.

When asked about accidents and suicide rates within the industry, participants pointed to cutbacks to staffing in light of increasing material prices and ‘lowest price’ procurement models. It was noted that projects that would have had a team of surveyors previously may have only two staff onsite in the current climate. It was argued that these staff reductions not only lead to significantly increased workloads but also pose risks to mental health as stress levels rise in tandem.

Similarly, a participant noted that clients aim to shorten programme durations as a cost-saving measure. This compresses resources, puts more people into a smaller timeframe and adds stress to the amount of paperwork onsite that is required to monitor quality and safety and meet regulations: “People are doing more with less time. People make mistakes and take shortcuts.” Another participant agreed, arguing that “when you’re pushing everybody into one space...you’re falling over each other to get things done quickly. People aren’t doing the right checks... not checking the scaffold right.”

When discussing rising accident rates, participants also flagged ongoing challenges with competency, noting that “a lot of training is...a paper ticking exercise, it’s not sufficient.” As the industry grapples with ongoing staff and skills shortages, finding suitably qualified and experienced people is further challenged.

Participants cited ongoing external pressures relating to rates of suicide in the sector. They cited the long-term implications of the pandemic in several ways, including for those suffering from long Covid, those that lost family and friends throughout the pandemic,

the continued impacts of lockdowns, and its ongoing financial implications.

Pressures in the sector were raised in relation to mental health concerns, with participants noting again the often high-stress environment in which people across the industry are working with long hours, heavy workloads and the impact of the financial and supply chain challenges outlined in other sections of this report. Participants noted a lack of support within the industry not only for those struggling to cope with stress and have mental health challenges of their own but for those that may have been – directly or indirectly – affected by the suicide of a colleague.

‘Lowest price’ tendering processes were cited as a driver for cutbacks to staffing and health and safety protocol and for undermining the quality of the built environment. A public sector representative – as a key client – highlighted efforts to reform procurement models to include a quality valuation. The same member also noted that ongoing pricing pressures due to inflation and rising interest rates threatened the quality evaluation element, leading to a tendering framework that is “90% price, 10% quality.”

# Conclusions

Scotland's construction sector is an integral part of the national economy and will continue to play a vital role in achieving Scotland's net-zero and Just Transition targets. However, the industry faces considerable financial pressures, exacerbated by ongoing skills shortages. Based on the data outlined in this report, there are policy actions that Scottish Government can take to support the industry and mitigate some of the challenges experienced across the length and breadth of the country.

- Create long-term clarity around funding and project pipeline – The industry would widely benefit from increased clarity and information about planned projects and demand for the future. We would like to see the Scottish Government develop a long-term strategy, accompanied by a sufficiently resourced enabling investment plan for public sector works, akin to the Project Ireland 2040 National Development Plan. The long-term strategy and investment plans contained within Project Ireland 2040 provide the sector with a clear pipeline of activity, thereby allowing businesses – and the training system – to plan accordingly.
- Skills stock-check – CIOB would like to see the Scottish Government take a comprehensive stock check of the current skills systems, how much they contribute in terms of new entrants and the current landscape of expected new entrants as compared to the number needed to promote construction as a growth industry. Similar legislation has been developed in Wales with its Net Zero Skills Action Plan. This stock check would allow the Scottish Government to refocus priorities to understand what changes need to be made to existing systems and what new systems need to be implemented to stimulate the growth of the construction labour force.
- Increased resources for apprenticeships – Current funding schemes continue to be a barrier for many firms when it comes to recruiting an apprentice and up-skilling staff. With so many funding pots available, access to finance is made more complex for many SMEs. We believe it is vital for the future of construction to have an apprenticeship system that works for the industry in order to address skills gaps and shortages. With the current labour landscape, unemployment levels continue to decline with fewer available skilled workers on the market. More must be done to stimulate recruitment for the construction industry, and mechanisms to incentivise recruitment by small and medium enterprises that hire apprentices could be offered.

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