
Briefing 6: Objectives for low-energy construction in Hampshire

The following briefing note summarises some of the key findings from NEF's recent report for Hampshire County Council, 'A Green Economic Recovery for Hampshire'. For the full report see [Hampshire 2050/NEF](#)

Background

This briefing gives an overview of some of the key objectives and challenges that NEF Consulting has identified for the low-energy construction sector in Hampshire, informed by secondary research and a series of workshops with experts and local stakeholders. It is less solution-focused than other briefings, and instead looks to summarise some of the key insights that underlie the policy recommendations.

Objective: High quality of construction

A critical objective for Hampshire is the need for greater attention to detail in the construction for new homes and retrofit. Research by housing charity Shelter found that 51% of new-build homeowners in the UK experienced major property problems like construction issues, unfinished fittings, and faults with utilities.¹

Challenges:

- Poor-quality construction has been linked to reduced levels of quality control in building works. Experts consulted noted that building inspectors from private organisations (as opposed to those from the Local Authority Building Control) have the incentive to approve works, meaning that errors often go uncorrected. In addition, primarily inspecting quality at the end of the project is likely less efficient than monitoring it at the design stage.
- Although traditionally trained on-site workers can construct walls and foundations effectively, they can lack the training to deal with building physics issues such as [thermal bridging](#), which can be a major source of energy loss in buildings and homes. Poor-quality construction has also been linked to lower training standards, with anecdotal evidence of answers being handed out in exams and inaccuracies in teaching.
- The lack of incentive to upskill remains a significant challenge. Participants suggested that Hampshire authorities ought to set high energy efficiency standards on the retrofit and construction of their own stock, and in doing so incentivise contractors to train new staff and upskill existing people. It should be calibrated to affect the whole value chain from architects, planners, and designers to individual trades. The council should engage with building services organisations and could also use Employment and Skills Plans (ESPs) more effectively to incentivise.

Objective: Initial training that meets local needs, teaches net zero skills, and offers a route into the sector

Initial Vocational Education and Training (IVET) for construction sector workers in Hampshire must provide net zero training that prepares new entrants to work in the future construction sector at a scale proportionate to local needs.

Challenges:

- Participants highlighted the problematic way in which the Department for Education funds further education (FE) providers. Moreover, funding for the sector has declined, with funding for education colleges and sixth forms for 16–19-year-olds seeing the greatest per-pupil fall of any sector of the education system since 2010–2011.
 - The funding provided is based on the overall allocation of full-time learners. FE providers can primarily decide the courses provided, meaning they can promote one over another if they wish.
-

In practice, this means training places are not driven by local economic need or industrial strategy but by what the FE provider can make financially sustainable. The National Audit Office's report on the financial sustainability of the colleges in England echoes these concerns,² finding that the financial health of the college sector is 'fragile' and 'financial pressures are affecting wider aspects of provision such as the breadth of the curriculum and levels of student support.'

- Trainees in full-time courses can struggle to make it into the industry due to the lack of workplace training. This may be partly due to the sector's employment structure – with high levels of self-employment and subcontracting – which undermines the capacity to provide employer-based training.

Objective: A construction sector that is more representative of society

The council should strive to ensure that the construction sector in Hampshire is more representative of society, particularly addressing the underrepresentation of women, young people, and ethnic minorities.

Technological developments and climate change have catalysed a change in construction processes. Nearly zero energy construction requires staff have greater thermal literacy, broader qualification profiles, and a more integrated way of working. These shifts can open up the possibility of including more women, particularly given their greater educational attainment and greater presence in environmentally oriented courses.^{3,4}

Challenges:

- The under-representation of women, minorities, and young people has been linked to the difficulties young people face in getting work experience and entering the sector. In many European countries and the UK, there are consistently higher numbers of women undertaking vocational education and training (VET) courses in construction than in construction employment. This indicates that many women want to work in the industry but fail to enter it.⁵ Lessons learned from the Women in Construction initiative indicates that procurement demands from clients specifying local labour targets and workforce diversity were significant in driving the engagement of main contractors.⁶
- Other structural barriers exist, including the dissuasive power of male-dominated work environments. The sector's informality has also exacerbated its perception as a 'fall-back option' rather than a career. Many of the workforce rely on self-teaching and on-the-job learning rather than following a career path.
- Participants noted that new entrants could be dissuaded by the sometimes poor job quality in the sector (ie precarious contracting, bogus self-employment, lack of sick pay). With the industry heavily reliant on small and medium enterprises (SMEs) and self-employed (with 40% of the workforce self-employed), competition within the sector makes it difficult for firms to raise standards independently.

Objective: Net zero reskilling of the existing workforce

As well as properly training new construction sector entrants, existing construction sector workers must be given net zero training via Continuous Vocational Education and Training (CVET). This will ensure they can properly install new technologies and that their practice incorporates an appreciation of building physics to minimise performance gaps. Participants also noted a greater need for communication with customers, as energy efficiency concepts and new technologies need to be clearly explained. For both CVET and IVET, 'training the trainers' was also identified as a critical priority.

Challenges:

-
- A funding deficit was identified for the CVET, as Hampshire previously used the (now discontinued) Construction Skills Fund. In addition, available grant funding for additional training is 'ringfenced' for people with specific needs, particularly the recently unemployed. Greater strategic oversight is needed in the construction sector, as greater funding must be in place for the long term for sufficient reskilling.
 - The opportunity cost of training (via days of work lost) is too high for many working in construction: the 'earn or learn' dilemma. This is particularly salient in construction due to the high proportion of the workforce that is self-employed or working at small firms. Only 30% of sole traders had funded or arranged training for themselves or indirect staff, compared to 59% of employers in the wider construction sector.⁷

Objective: Investment in training facilities

The facilities used to train construction workers require adequate investment.

Challenges:

- The lack of a clear funding source remains a key issue. Currently, the capital funding for training providers to set up a centre for excellence is inadequate and comes from Local Enterprise Partnership growth funding. This system contrasts with other European nations, such as Germany⁸ where colleges are excellently equipped. Those facilities have more modern technologies available, enabling students to develop skills beyond standard practice, which is highly relevant for embedding modern construction methods into the sector.

Objective: Greater societal value placed on construction

The sector must be better valued by society to benefit its workforce and attract a more representative cohort of society.

Challenges:

- Construction, like other trades and further education, is undervalued compared to Higher Education. This contrasts with other European nations where it is placed on an equal footing. Teachers and parents need to be persuaded, and skills for construction need to be more integrated into the school system. Additionally, the sector's fragmented nature – with high levels of sub-contracting and self-employment – can undermine the sector's perceived professionalism.

Objective: A strategically planned sector

There is a need for a (national) strategy for students, colleges, and inspectors that identifies total and local resourcing targets, and supports them with funding.

Challenges:

- The current employer-led approach is inadequate and ill-suited to dealing with the rapid changes needed in the sector. While the council's existing Skills Strategy and Action Plan have had some impact, in the absence of an overarching strategic plan, these appear insufficient on their own.

¹ Kollwe, J. (2017). More than half of new-build homes in England 'have major faults'. *The Guardian*, 2 March. Retrieved from <https://www.theguardian.com/business/2017/mar/02/over-half-of-new-build-homes-in-england-have-major-faults>

² National Audit Office. (2020). Financial sustainability of colleges in England. London: NAO. Retrieved from <https://www.nao.org.uk/report/financial-sustainability-of-colleges-in-england/?slide=1>

³ Clarke, L., Gleeson, C., Sahen-Dikmen, M., Winch, C., Duran-Palma, F. (2019). *Inclusive vocational education and training for low energy construction*. European Construction Industry Federation AISBL (Domenico Campogrande) and EFBWW European Federation of Building and Woodworkers. (Chiara Lorenzini / Rolf Gehring). Retrieved from <https://www.fiec.eu/our-projects/completed-projects/vet4lec>

⁵ Clarke, L. (2021). Women in the Building Sector. In: Casse, C. & De Troyer, M. (Eds). *Gender, working conditions and health, What has changed?* Brussels: European Trade Union Institute. Retrieved from <https://www.etui.org/publications/gender-working-conditions-and-health>

⁶ Wright, T. (2014). The Women into Construction Project: an assessment of a model for increasing women's participation in construction. London: Centre for Research in Equality and Diversity, Queen Mary University of London.

⁷ Construction Industry Training Board. (2018). Skills and training in the construction industry survey (2018). Peterborough: CITB. Retrieved from <https://www.citb.co.uk/about-citb/construction-industry-research-reports/search-our-construction-industry-research-reports/skills-and-training-in-the-construction-industry-2018/>

⁸ UK Parliament. (2007). Memorandum submitted by Professor Linda Clarke, Westminster Business School. Retrieved from <https://publications.parliament.uk/pa/cm200708/cmselect/cmberr/127/127we53.htm>
