

CIH response to Invest 2035: The UK's Modern Industrial Strategy

Chartered Institute of Housing (CIH) is the professional body for people who work or have an interest in housing. We welcome the opportunity to respond to the UK government's consultation on Invest 2035: The UK's Modern Industrial Strategy.

We have responded only to those questions where we can provide an informed and evidence-based response.

Responses to individual questions

Q3. How should the UK government incorporate foundational sectors and value chains into this analysis?

The government should consider housing and construction as foundational sectors in its analysis.

Specifically, the industrial strategy must consider how it can support the aims and objectives of the housing strategy, currently under development by MHCLG, and it should similarly consider the role that housing plays as a foundation for health, growth, and prosperity across the UK. We would also encourage the government to consider more detailed recommendations on incorporating the construction sector into the strategy by industry bodies such as the Chartered Institute of Building (CIOB), which we would support.

Housing

The government has been clear about the importance of housing and planning to fulfil its growth ambitions across the UK¹. In England, this was most clearly demonstrated in the recent National Planning Policy Framework (NPPF) consultation, which CIH welcomed and responded to². The role of housing is crucial to delivery of its missions. Far too many people are living in overpriced, insecure and poor-quality housing which undermines life chances³ and puts pressure⁴ on the public purse and services.

At the heart of these issues is a lack of truly affordable housing. The recent planning reforms announced in the NPPF aim to help deliver the government's commitment of 1.5 million homes, which is a crucial and positive step. Whilst planning reforms are very

1 <https://questions-statements.parliament.uk/written-statements/detail/2024-07-30/hcws48>

2 <https://www.cih.org/publications/cih-submission-to-the-consultation-on-proposed-reforms-to-the-national-planning-policy-framework/>

3 <https://www.jrf.org.uk/housing/the-links-between-housing-and-poverty>

4 <https://bregroup.com/news/bre-report-finds-poor-housing-is-costing-nhs-1.4bn-a-year>

welcome, they can only be part of the response to tackling the housing crisis. Social housing providers are operating in increasingly difficult financial environments, with the Regulator of Social Housing recently reporting that “the risks to local authorities’ and private registered providers’ viability have intensified and their financial performance continues to weaken”⁵. With intensified spending on existing homes and wanting to fulfil the government’s ambition of 1.5 million new homes, many social housing providers and local authorities⁶ are making difficult decisions with reduced financial capacity.

We therefore welcomed recent announcements in the Autumn Budget⁷ regarding further grant funding and updates on a long-term social rent settlement and the right to buy programme. The industrial strategy emphasises the need for certainty and confidence, and we look forward to engaging with the government’s upcoming long-term housing strategy, which is something CIH has called⁸ for. It is essential that all areas of government work collectively to achieve its growth ambitions, which includes ensuring that the forthcoming housing strategy corresponds with the industrial strategy. In order to achieve the goal of building 1.5 million homes, the housing sector must be supported (as outlined in our Autumn Budget submission⁹), and all policies must be developed cohesively to ensure growth is sustainable, fair and effective for those who most need it.

The government’s ambitions to build 1.5 million new homes this parliament and improve the quality of existing homes are central to the broader aims of economic growth and productivity. Research from the National Housing Federation and Shelter has shown that building 90,000 social rented homes would add £51.2 billion to the economy, supporting almost 140,000 jobs¹⁰. The economic benefits of this would continue over the longer term, through the management of more social homes, savings on housing benefit, and wider benefits including reduced homelessness, increased employment, and improved healthcare¹⁰. Evaluations of programmes to improve the quality and energy efficiency of existing homes have also highlighted significant boosts to job creation¹¹ and local

5 https://assets.publishing.service.gov.uk/media/67121ccf8a62ffa8df77b314/20241004_Sector_Risk_Profile_2024.pdf

6 <https://www.southwark.gov.uk/community-updates/2024/securing-future-englands-council-housing-report>

7 <https://www.cih.org/news/cih-s-reaction-to-the-2024-autumn-budget/>

8 <https://www.cih.org/publications/homes-at-the-heart-a-strategy-for-housing/>

9 <https://www.cih.org/publications/cih-submits-evidence-to-autumn-budget-and-forthcoming-spending-review/>

10 <https://www.housing.org.uk/globalassets/files/cebr-report-final.pdf>

11 <https://www.gov.uk/government/publications/whole-house-retrofit-and-social-housing-decarbonisation-fund-demonstrator-joint-process-evaluation>

economic growth¹², as well as reductions in NHS costs, improved educational attainment for children, and wider societal benefits¹³.

CIH firmly believes that our homes are the foundation for our health and wellbeing, but this evidence shows that the twin objectives of building more homes and improving the quality of existing homes can contribute significantly to economic growth and productivity. Housing is also a fundamental enabler of industrial policy, primarily because growth is more challenging to achieve if not accompanied by safe, affordable, good quality homes for workers near clusters of growth-driving sectors and subsectors. As the green paper recognises, coordinating the development of industrial clusters with new housing developments, including new towns, will enable labour markets to grow and operate effectively and thus be an important determinant of success.

We feel that to accomplish this, the industrial strategy should be aligned with, and where necessary support, other strategies being developed across government. Specifically, we understand that MHCLG is currently developing a 10 year housing strategy, which is scheduled for publication in the spring. The industrial strategy must consider how it can support its aims and objectives, and it should similarly consider the role that housing plays as a foundation for health, growth and prosperity across the UK.

Construction

The construction sector is a key economic driver that plays a central role in prosperity, health, productivity, sustainability and wellbeing. It provides the literal and physical foundation for our homes, buildings, and infrastructure projects. However, the construction sector has faced acute challenges throughout the COVID-19 pandemic, with a 33.9 per cent increase in construction firms becoming insolvent in 2024, compared to 2019¹⁴. The industry also faces a difficult skills shortage. For example, research by the London Homes Coalition that London faces a gap of over 2,600 skilled construction and built environment workers in the next five years, especially in key trades such as roofing and surveying¹⁵.

We would therefore like to see the industrial strategy recognise the importance of construction as a foundational sector for meeting its objectives, alongside housing, and would encourage the government to consider more detailed recommendations put forward by industry bodies such as the Chartered Institute of Building (CIOB), which we would support.

12 <https://www.nea.org.uk/wp-content/uploads/2022/08/3.-Full-Report-FINAL.pdf>

13 https://files.bregroup.com/corporate/BRE_the_Cost_of_ignoring_Poor_Housing_Report_Web.pdf

14 <https://bcis.co.uk/news/construction-insolvencies-latest-news>

15

https://static1.squarespace.com/static/668c508ebd52a5762d27cf06/t/668e9d67e9ae0c0b8c86b18e/1720622442915/London+Homes+Coalition_Building+Skills+for+the+Future_Main+report_July+2024_1.1.pdf

Q4. What are the most important subsectors and technologies that the UK government should focus on and why?

Advanced manufacturing

One area the government should focus on as part of the advanced manufacturing sector is Modern Methods of Construction (MMC). MMC is a construction method, and can be defined as referring to factory-made homes, or significant elements of homes, that are precision engineered in facilities using continuous improvement processes. There are different types of MMC, ranging from off-site volumetric manufactured to non off-site manufactured. MMC is therefore a subsector of the advanced manufacturing sector in the industrial strategy.

There are three reasons the government should focus on MMC. Firstly, research by CIH¹⁶ and an inquiry carried out by the House of Lords Built Environment Committee¹⁷ has shown that MMC can contribute to significant housing supply and quality challenges. The government has a welcome target to build 1.5 million new homes this parliament, and our research shows that MMC can play a significant role in supporting this objective. MMC can accelerate the supply of new homes, tackle inconsistency in build quality and energy efficiency, improve affordability for occupants, and significantly reduce the build costs of new homes. The speed and build costs of new homes are particular barriers to the government's ambitions, but our review found evidence that MMC can cost 20 per cent less than traditional construction methods when optimised for scale, and accelerate development timelines by 20 to 50 per cent.

Secondly, MMC meets the government's prioritisation approach. As noted in our response to question six, MMC has several barriers to growth, but has significant potential for global competitiveness. It is an emerging, capital-intensive industry with high entry barriers, and would benefit substantially from catalytic government support to scale-up and crowd-in investment. If this support is provided to the extent that a third of all new homes use MMC, our research found evidence that this could supply an additional 265,000 homes in the next 10 years, contributing to government targets.

Thirdly, MMC has the potential to generate economic growth spread evenly across the UK, especially in post-industrial towns and cities, by de-anchoring housebuilding from the physical location of homes (i.e. constructing them off-site). For example, our research found evidence that when developed into a mature industry, MMC could deliver £700 million of investment to deprived parts of England. We also found evidence that due to its factory-based nature, the skills barrier for new labour is lower, opening the MMC labour pool to a wider base of workers¹⁶.

Clean energy industries

¹⁶ <https://committees.parliament.uk/writtenevidence/126535/html/>

¹⁷ <https://committees.parliament.uk/publications/43073/documents/214242/default/>

CIH supports the government's focus on clean energy industries in the industrial strategy, and its mission to accelerate renewable and clean energy. We agree that the industrial strategy should support subsectors within the clean energy industry. One subsector that should receive consideration in the industrial strategy is clean heating, retrofit, and domestic renewable technologies (CHRDR) subsectors, as well as the workforce and skills development that is required to expand these subsectors.

The government's independent Climate Change Committee has stated that by 2030, approximately 10 per cent of homes will need to be heated by a heat pump, compared to approximately one per cent today. By 2050, a majority of homes will be heated with a heat pump¹⁸. The government also has a target that a fifth of all domestic heat is provided by heat networks by 2050, and the Climate Change Committee expects the retrofitting of loft, wall, and floor insulation in existing homes to rise exponentially between now and 2030 to meet statutory climate and fuel poverty targets. In addition, most net zero scenarios require the deployment of other renewable energy technologies in homes, such as solar PV and battery storage. The manufacture, sale, and export of these technologies is a significant growth opportunity because the UK has historic strengths in the home heating industry, and several fossil fuel boiler manufacturers have already diversified into the production of clean heating technologies.

Simultaneously, the deployment of CHRDR will require an expanded net zero workforce. The Climate Change Committee have emphasised that this is a significant opportunity for growth, stating that up to 725,000 net new jobs could be created in sectors such as buildings retrofit and renewable energy generation. They estimate a further fifth of current workers are in sectors that will play an enabling role in the net zero transition, such as financial services and education. However, the Climate Change Committee also warn that this growth is not guaranteed, particularly in the context of international competition; it will require active reskilling and upskilling, which government will be required to support. They conclude that "the UK must capture a lead in key markets and ensure that workers with the right skills can be attracted"¹⁹.

In this context, the UK's focus on clean energy industries should focus on CHRDR, as well as taking steps to boost the workforce that will be required to retrofit homes and deliver the growth of the industry. Doing so is likely to deliver not only economic growth, but lower energy costs, contributing to the government's pledge to reduce energy bills for domestic households.

Creative industries

Lastly, we would welcome consideration of architecture as a subsector to support under the creative industries strand of the industrial strategy. There is evidence that architecture

¹⁸ <https://www.theccc.org.uk/wp-content/uploads/2024/07/Progress-in-reducing-emissions-2024-Report-to-Parliament-Web.pdf>

¹⁹ <https://www.theccc.org.uk/wp-content/uploads/2023/05/CCC-A-Net-Zero-Workforce-Web.pdf>

contributes approximately £4.8 billion to the UK economy, and that a further £1 billion per year contribution is embedded in the exports of the other industries it supports, including banking, museums, transport, and IT services²⁰. Furthermore, evidence shared with us by the Royal Institute of British Architects (RIBA) suggests that RIBA chartered practices alone contribute up to £3 billion to the UK economy.

Alongside the housing and construction sectors, architecture is also a critical sector contributing to the government's target of building 1.5 million high quality, sustainable homes this parliament. At minimum, we would therefore like to see the industrial strategy making connections with wider architectural policy, via appropriate work with the Ministry for Housing, Communities and Local Government (MHCLG).

Q5. What are the UK's strengths and capabilities in these sub sectors?

Advanced manufacturing

Evidence²¹ submitted to the House of Lords Built Environment Committee inquiry into MMC suggests a range of strengths and capabilities, including:

- Facilitating more competition in the market by bypassing labour and skills constraints on traditional building, which in turn can stimulate greater economic activity and delivery across all forms of housebuilding.
- Diversifying housebuilding and generating innovation by adding to the pool of housebuilders.
- Helping SME builders to build out sides, which can give smaller builders access to revenue.
- Diversifying and expanding the construction products supply chain.
- Allowing housebuilding to grow substantially by expanding the pool of potential workers and developing a different training model.

This evidence suggests MMC can provide additionality to the market, resulting in increased growth and productivity as well as the realisation of the opportunities noted in our response to question four.

Clean energy industries

The UK has historic strengths in its incumbent workforce that can be harnessed for the clean energy transition and the expansion of CHRD. For example, the Climate Change Committee estimates that up to 75,000 workers could be transitioned from carbon-emitting sectors to the clean energy sector, providing the appropriate government support is put in place²². The Heat Pump Association estimates that a minimum of 50,200 installers will be required to meet heat pump installation pathways by 2030, with 52 per

20 <https://committees.parliament.uk/writtenevidence/124578/pdf>

21 <https://committees.parliament.uk/writtenevidence/126710/pdf/>

22 <https://www.theccc.org.uk/wp-content/uploads/2023/05/CCC-A-Net-Zero-Workforce-Web.pdf>

cent of this workforce expected to be composed of reskilled heating engineers²³. Existing plumbing and heating engineers and wider workers in the retrofit and construction industry could therefore be reskilled to fill an anticipated gap in key net zero trades, especially project managers, retrofit coordinators, plumbers, heat pump installers, and ventilation installers.

The UK also has historic strengths in heating appliance manufacturing and is well placed to capture significant opportunities in CHRDR. Capitalising on these strengths would allow the government to drive down the upfront cost of heat pump units and wider renewable technologies, which is a significant barrier to their adoption, and stimulate the expansion of the net zero workforce.

Q6. What are the key enablers and barriers to growth in these sub sectors and how could the UK government address them?

Advanced manufacturing and Modern Methods of Construction

Research by CIH²⁴ and an inquiry carried out by the House of Lords Built Environment Committee²⁵ noted the following key barriers to growth in the MMC subsector:

- High capital costs and the lack of sustainable pipelines. MMC factories are significant capital commitments that require a steady and predictable demand for their products to remain viable. In previous years, the lack of a sustainable pipeline has been one of the core drivers of the closure of MMC housebuilders.
- Challenges with business models and finance. In particular, the capital commitment that is required to establish viable MMC factories is substantial, and constitutes a high entry cost.
- Data monitoring and accuracy. There is no established database on the growth and position of MMC in England, and this means there is a lack of authenticated data on which to make investment decisions or develop government policy.
- Complexities in accreditation and standardisation. In January 2023, the government commissioned the British Standards Institute to develop recommended technical standards for MMC in housebuilding, via a Publicly Available Specification. This specification was due to be released by the end of 2024, but at the time of writing is at public comment stage and publication is delayed until March 2025.
- Inconsistent government support to date, especially on the demand side. Government has mandated minimum MMC rates in the Affordable Homes Programme (AHP), but this has been insufficient to grow the sustainable pipeline

23 <https://www.heatpumps.org.uk/wp-content/uploads/2023/12/HPA-Unlocking-Widescale-Heat-Pump-Deployment-in-the-UK.pdf>

24 <https://committees.parliament.uk/writtenevidence/126535/html/>

25 <https://committees.parliament.uk/publications/43073/documents/214242/default/>

required by MMC manufacturers. Evidence also suggests that MMC can play a significant role in building zero-carbon homes, but government has not yet introduced the Future Homes Standard or consulted on how to reduce embodied carbon from the housebuilding process.

Some of the actions that government could take to address these barriers are:

- Conclude and implement the Future Homes Standard, and bring forward a policy on regulating embodied carbon in the housebuilding process.
- Increasing the proportion of the Affordable Homes Programme that is dedicated to MMC. This could be brought in as part of a new Affordable Homes Programme, to begin in 2026, and would provide a demand-side stimulus and some certainty of demand to the MMC subsector.
- Supporting research and development into innovative and hybrid MMC business models that are not dependent on large, expensive factories. For example, Cornerstone Place utilise a hybrid model entitled Impact First Social Housing, whereby the design of modular components is separated from their delivery and construction. In this model, architects design components for new-build schemes, and the components themselves are built by manufacturers local to the build site, therefore supporting existing businesses and spreading the financial benefit among a larger number of suppliers. This model has the advantage of not necessitating large modular and MMC factories to be viable.

Clean energy industries

Previous research and analysis from CIH has pointed to several barriers in the development of CHRDR, and its associated workforce. We have set out a full analysis of these barriers in our Housing Strategy²⁶. Many of the barriers are complex and owned by different parts of government.

- For homes across Great Britain, the price they pay for electricity is approximately four times the price of gas, because the UK's energy market is based on marginal cost pricing. This means that cheaper renewable electricity generation does not currently filter down to household bills, because the price of electricity to households is predominantly set by the (higher) price of gas. This is a barrier to the adoption of clean heating technologies, especially in lower-income households, because their running costs are often unaffordable. This contributes to lower demand for clean heating, inhibiting growth in the subsector.
- The upfront cost of clean heating technologies is also a barrier. For example, research into heat pump adoption undertaken by Energy Systems Catapult as part

²⁶ <https://es.catapult.org.uk/report/electrification-of-heat-home-surveys-and-install-report/?reportDownload=https://es.catapult.org.uk/wp-content/uploads/2022/12/BEIS-Electrification-of-Heat-Home-Survey-and-Install-Report.pdf>

of the Electrification of Heat trials reported a total cost per property of £14,800 including the heat pump unit, additional measures (e.g. thermal storage) and installation. When additional measures were excluded, the average cost of a low temperature air source heat pump installed through the project was £9,000, but with a minimum cost of £5,300 and a maximum cost of £19,600 - the latter over £10,000 above the average²⁶. This means that the upfront cost of heat pump units limits demand from homeowners and landlords, inhibiting the growth of the subsector.

- Policy and regulatory uncertainty have been a considerable barrier to the growth of the CHRDR. The Future Homes Standard, which under most recent proposals would see the majority of new homes installed with heat pumps and solar PV, has been delayed for several years. The previous government's flagship policy to incentivise the growth of UK heat pump manufacturing, the Clean Heat Market Mechanism, was delayed, and its status is currently uncertain. This policy environment has created an inertia, deferring investments that might otherwise have been made into expanding CHRDR.

Some of the actions that government could take to address these barriers are:

- Consider how to rapidly reduce the cost of electricity to households and business this decade. This would make heat pumps more affordable for households and remove a critical barrier for their adoption by homeowners and landlords.
- Examine policies to stimulate innovation and disruption in the clean heating and domestic renewable energy manufacturing and supply chain. This would make the up-front costs of clean heating and domestic renewable energy technologies cheaper, lowering a significant barrier to household demand.
- Take immediate steps to stabilise and give public clarity on the net zero policy environment for homeowners and landlords. This should include the implementation of the Future Homes Standard and confirmation of regulatory requirements for low-carbon heating (e.g. through heat network zoning, the phase-out of fossil fuel heating off the gas-grid). It should also include the confirmation of a 10 year retrofit programme for existing homes, which will give housing providers and the supply chain the confidence that demand for CHRDR services will grow, incentivising them to invest.
- With regards to skills and workforce expansion, we would support the creation of a Green Skills Fund, which has been proposed by the Chartered Institute of Building (CIOB)²⁷. This would be a fund dedicated to developing a pipeline of workers with green construction skills, such as training in retrofit coordination, heat pump installation, and similar roles. It could be offered to new entrants (e.g. through apprenticeships) and to upskill existing workers. A fund of this type, building on

27 <https://www.ciob.org/industry/politics-government/campaigns/2024-general-election-manifesto>

the previous government's broadly successful green skills initiatives (e.g. the Heat Training Grant) would offer a one-stop-shop for the development and growth of a net zero workforce.

Q8. Where you identified barriers in response to question 7 which relate to people and skills (including issues such as delivery of employment support, careers, and skills provision), what UK government policy solutions could best address these?

We have included solutions to these barriers in our responses to questions four, five, six, and 30.

Q9. What more could be done to achieve a step change in employer investment in training in the growth-driving sectors?

Please see our responses to four, five, six, and 30.

Q28. How should the Industrial Strategy accelerate growth in city regions and clusters of growth sectors across the UK through Local Growth Plans and other policy mechanisms?

There are two ways we feel the strategy can accomplish this.

1. The strategy can accelerate growth through the development of local growth plans, which will provide devolved decision-making to meet local needs. It is necessary that these correspond with local plans and housing targets (the importance of which is noted in the NPPF proposals²⁸), as well as strategic supported housing plans (as seen in the Supported Housing (Regulatory Oversight) Act 2023) and tackling homelessness with housing need assessments. Once these plans are aligned, a local area can thrive and develop in a way that meets the needs of the community, particularly for the most vulnerable. This joined-up approach is reflected in the industrial strategy, particularly through the partnership working with national and regional leaders, and we welcome the commitment to bring strong foundations for success across the country.

The geographical clusters outlined in the strategy demonstrate the opportunities for regional growth and unlocking the full potential of communities across the UK. It is positive that the government is exploring how the recently announced New Towns will be incorporated into the industrial strategy, as we await an update from the New Towns Taskforce next year. Large-scale developments to meet housing need and demand are welcomed, and will provide an ambitious and necessary avenue to boost development. These developments will be identified to meet housing needs and demand, but housing will also be foundational to attract growth and employment opportunities to the cluster

²⁸ <https://www.gov.uk/government/consultations/proposed-reforms-to-the-national-planning-policy-framework-and-other-changes-to-the-planning-system/proposed-reforms-to-the-national-planning-policy-framework-and-other-changes-to-the-planning-system>

areas. As such, it is crucial that the industrial strategy outlines that housing must underpin all identified clusters.

2. We would welcome a focus in the industrial strategy on how economic growth and productivity can be inclusive, delivering prosperity and opportunity across income deciles, demographic groups, and regions of the UK.

To return to the subsectors we have described earlier in this response, research by the Sutton Trust has documented persistent socio-economic inequalities in the creative industries workforce. Their research shows that architecture is the subject with the largest percentage of students from upper-middle-class backgrounds and one of the lowest proportions of state school students. More generally, they find that there are low proportions of students from lower socio-economic backgrounds on a range of creative degree courses²⁹. Similarly, the Climate Change Committee has emphasised that CHRDR roles have historically had an under-representation of women and ethnic minorities³⁰.

The industrial strategy therefore represents an opportunity to examine how the creation of high-paying, skilled jobs can be diversified, reversing historical trends and delivering inclusive growth that closes socio-economic inequalities. We would like to see an explicit focus in the finalised industrial strategy on how the chosen sectors and subsectors can widen opportunity across the UK, and benefit historically disadvantaged and underrepresented demographic and socio-economic groups.

Q29. How should the Industrial Strategy align with devolved government economic strategies and support the sectoral strengths of Scotland, Wales, and Northern Ireland?

CIH works across all four nations of the UK. While the points made elsewhere in our response are applicable to all UK nations, the industrial strategy will need to consider and align with the following aspects of economic policy in Wales and Northern Ireland.

Wales

1. Modern methods of construction and offsite manufacturing is a key part of the solution to building more affordable homes in Wales. Cartrefi Conwy's factory in Rhyl³¹ and United Welsh's Celtic offsite factory in Caerphilly³² are examples of how this method of construction can not only increase the number of affordable homes we can deliver but also drives investment in the local economy. Celtic offsite can deliver up to 500 modular build affordable homes every year with a construction time of around six weeks less than a traditional build. In addition, Celtic offsite is run as a social enterprises ensuring that the

29 <https://www.suttontrust.com/wp-content/uploads/2024/11/A-Class-Act.pdf>

30 <https://www.theccc.org.uk/wp-content/uploads/2023/05/CCC-A-Net-Zero-Workforce-Web.pdf>

31 <https://www.creatingenterprise.org.uk/en/modular-solutions/>

32 <https://www.unitedwelsh.com/celtic-offsite/>

profits are invested into building more affordable homes and decarbonising existing homes in Wales.

These projects are also helping to develop local supply chains, but we need to ensure that wider supply chains are able to meet the needs of the construction industry in Wales. Our Tyfu Tai research³³ found that 90 per cent of housing organisations in Wales were having significant or moderate issues with supply chains for building new homes. There were also increased prices of 30 per cent to 40 per cent in the cost of materials including timber, steel, concrete and fencing. There is a need for a UK wide strategy to overcome the supply chain issues and ensures that the best price for construction materials can be achieved, with equal access for all four UK nations. We also need to look at ways to maximise the opportunities local supply chains provide when housing organisations set up MMC factories to enable a higher number of affordable homes to be developed.

2. Welsh government is also investing in the decarbonisation of existing social homes through its Welsh Housing Quarterly Standard, which has set a target for all social homes to meet EPC Band C by 2030. All social landlords need to develop a targeted energy pathway by March 2025 to outline how they will bring their homes up to EPC Band A, and by what date. Welsh government has invested a total of £92 million to decarbonise existing homes together with £108 Million in LSVT dowry payments in its 2024/25 budget. Yet According to the Future Generations Commissioner's Homes Fit for the Future: The Retrofit Challenge (carried out by New Economics Foundation)³⁴ there is a £2.7 billion funding gap in the amount needed to retrofit social housing and a £3.9 billion gap to retrofit homes in fuel poverty in Wales. It goes on to say that the total investment needed over the next decade to retrofit social housing stock in Wales is £5.52 billion (£4.82 billion to retrofit homes in fuel poverty) with around £1.7 billion of that to come from Welsh government and £3.6 billion from Westminster government.

Yet decarbonising the social housing sector is only part of the solution to ensuring that homes in Wales can meet Welsh government's 2050 net zero target. There is also a need to decarbonise homes in the private sector, both rented and owned. Our Tyfu Tai research in decarbonising the private rented sector³⁵ outlined that this tenure has the worst energy efficiency in Wales, with the total cost for meeting EPC Band C alone put at £846 million³⁵. The Senedd's Local Government and Housing Committee. in their report on decarbonising the private sector, acknowledged that Welsh government cannot cover the cost for decarbonising private homes, but proposals should be developed for financial solutions for the able to pay sector.

33 <https://www.cih.org/media/4hwfxjg2/shocks-in-the-supply-chain-final-eng.pdf>

34 https://www.futuregenerations.wales/resources_posts/homes-fit-for-the-future-the-retrofit-challenge/

35 <https://www.cih.org/media/zbccclbu/0510-ttc-decarbonising-wales-private-rented-sector-v5.pdf>

A key part of this is to ensure that all buildings in Wales can access net zero heat. Buildings and industry in Wales account for 50 per cent of the energy demand in Wales. Welsh government has produced a heat strategy for Wales to help drive progress in ensuring heat provision in Wales in net zero³⁶. As outlined in the strategy, part of this will involve working with the UK government especially where the proposals refer to our national electricity grid infrastructure. The heat strategy is also clear that part of the work needed is to upskill our workforce in Wales, and links into the net zero skills action plan which looks at how Wales can ensure we have enough people employed to install the technologies needed to decarbonise our existing homes and build the low carbon affordable homes that are needed across the country. As these net zero skills will be needed across all four UK nations, there will be a need to ensure that every nation has access to adequate levels of funding as part of a UK wide approach to decarbonisation and meeting net zero targets.

Northern Ireland

The industrial strategy should also align with Northern Ireland's devolved economic strategies to address sectoral strengths and overcome unique regional challenges, while reinforcing the importance of skills development, innovation and sustainability.

1. Similarly to the rest of the UK, achieving net zero in Northern Ireland requires a skilled workforce capable of meeting the demands of decarbonisation. Currently, significant gaps exist in trades essential for this transition, such as project managers, retrofit coordinators, plumbers and HVAC installers, as highlighted in our response to earlier questions. Addressing these gaps is crucial for reaching net zero by 2050. Specifically, to align with Northern Ireland's priorities, the Industrial Strategy will need to consider:

- How to support the embedding of low-carbon skills within the education sector by developing skilled tutors, apprenticeships and retraining opportunities. Investment in training programmes should be expanded to equip both public and private sector professionals.
- Northern Ireland's energy sector needs support to retrain professionals in offshore renewables, carbon capture and hydrogen technologies. These emerging industries offer significant growth potential and align with broader UK energy transition goals.
- Housing professionals must be equipped with knowledge of low-carbon technologies and their applicability to different homes. Training, accreditation and professional development opportunities should be prioritised to ensure successful resident engagement and low-carbon adoption.

2. MMC also represents a critical pathway for accelerating the delivery of zero-carbon homes in Northern Ireland, offering homes with lower heating costs and reduced carbon

36 <https://www.gov.wales/sites/default/files/publications/2024-07/heat-strategy-wales.pdf>

footprints compared to traditional builds. However, as explained in our previous responses, the MMC sector in Northern Ireland faces similar barriers to the rest of the UK, especially skills shortages, financial constraints and underdeveloped supply chains. To overcome these challenges in Northern Ireland, similar government support will be required to that noted in our responses to questions four, five and six.

3. Retrofitting Northern Ireland's housing stock is vital for reducing emissions and improving energy efficiency, particularly in the private rented sector, which has some of the poorest energy performance standards. In addition to the support required with skills and the supply chain noted in our responses to questions four, five and six, the industrial strategy should consider how to establish trusted advice hubs across Northern Ireland to provide residents and landlords with clear, tailored guidance on home decarbonisation. These hubs should integrate into a cross-tenure national retrofit strategy, offering both face-to-face and digital support.

4. Businesses, housing organisations and workers need assurance that low-carbon technologies and markets are profitable and viable in the long term. The industrial strategy must back this transition with clear, sustained investment. By fostering leadership in low-carbon construction, retrofit and energy, Northern Ireland can create job opportunities, stimulate economic growth and meet climate targets. There also needs to be a clear alignment between the UK's industrial strategy and Northern Ireland's 10X Economic Vision, which emphasises innovation, inclusion and sustainability as core priorities. The industrial strategy should mirror with these goals, focusing on regional innovation hubs, energy infrastructure and housing as a foundation for workforce mobility.

Q32. How can the UK government improve the interface between the Industrial Strategy Council and government, business, local leaders and trade unions?

We welcome the commitment to work with business, unions, experts, representative groups, and other stakeholders to develop the industrial strategy. We also welcome the recognition that the input of mayors and multinationals, councils and CEOs, devolved governments, and experts will be essential to formulating the industrial strategy.

Given the close links between housing, construction, architecture, and the industrial strategy, articulated throughout our response, we would encourage the government to consider how these sectors can support the finalisation of the strategy. We would welcome the opportunity to engage with government on behalf of housing professionals across the UK, and we feel that ourselves and professional bodies elsewhere in the built environment (such as the Chartered Institute of Building and the Royal Institute of British Architects) can support the government to establish the foundations on which its chosen eight growth-driving sectors can thrive.

The government should also engage proactively with housing associations as well as councils. Housing associations are anchor institutions in their communities, and play an important role as local employers. They also deliver a range of support activities in local communities, helping residents gain skills and employment opportunities, and contribute to economic activity through building new homes. Housing associations therefore have a unique insight into the factors that can underpin local and regional economic activity, and we would encourage government to include them in any engagement activities.

Similarly, firms in the construction and architecture sectors can bring their own important insights, and should be included in any engagement activities that are used to develop the industrial strategy.

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