

Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith /  
Climate Change, Environment and Infrastructure Committee  
Blaenoriaethau ar gyfer y Chweched Senedd / Priorities for the Sixth Senedd  
PR89  
Ymateb gan Sefydliad Brenhinol y Syrfewyr Siartredig / Evidence from Royal  
Institution of Chartered Surveyors (RICS).



Consultation Response

# Priorities for the Climate Change, Environment, and Infrastructure Committee

Response by the Royal Institution of Chartered Surveyors (RICS).





# Introduction

On behalf of the Royal Institution of Chartered Surveyors (RICS), can we first begin by congratulating you on your appointment to the Climate Change, Environment, and Infrastructure Committee.

Climate change is, without a doubt, one of the greatest challenges facing Wales, the UK and the world today, with its causes and consequences embedding itself into every aspect of our lives. That is why RICS, and its public interest remit, welcome the opportunity to feed into the consultation on the priorities of the committee during the Sixth Senedd.

## About RICS and its role in tackling climate change

Established in 1868, RICS is the largest organisation of its kind in Wales for professionals in property, construction, land and related environmental issues. With over 2000 members in Wales, our professionals influence all aspects of the built and natural environment including homes, high streets, schools, hospitals, transport networks, energy sources and rural land.

The built environment contributes almost 40% of the UK's total carbon footprint, so we recognise the important role RICS has in combatting climate change.

In the last twelve months, we have launched our [RICS Low Carbon Homes Consumer Guide for Wales](#), commissioned research to identify the environmental and economic benefits of cutting VAT for home improvement work and are supporting the Welsh Government in carbon measuring through our [Whole Life Carbon Assessment](#).

The [RICS World Built Environment Forum Sustainability Report](#), released in August 2021, strengthens evidence of the role the built environment has in tackling climate change:

- There has been a 55% growth in occupier and investor appetite for green and sustainable buildings in the last year.
- Embodied carbon continues to largely go unmeasured in housing and infrastructure projects.
- In Europe, construction professionals identified minimising waste, cleaner material supply and reducing operational carbon emissions as primary areas of concern for them in tackling climate change.

RICS is also involved in the VALUER Project, a BEIS-funded green homes scheme in South Wales, looking at the link between the need to retrofit homes, the impact that will have on property valuations and products and financial support available to homeowners. The project, in conjunction with Sero Homes, Monmouthshire Building Society and Rightmove, have selected two geo-fenced locations in South Wales (Parc Eirin, Eastern High, and the surrounding communities) to explore the private and public levers to create greener homes. RICS will be happy to discuss the project and its findings with the Committee further.

### **Priorities for the Climate Change, Environment, and Infrastructure Committee**

Ahead of the 2021 Senedd elections, [RICS released our manifesto](#), building on the expertise of our profession to call for the next Welsh Government to:

- Commit to large scale decarbonisation and energy efficiency of domestic and non-domestic properties.
- Create a funding, taxation and regulatory system which encourages people to become greener.
- Invest in skills and training at all levels to help Wales achieve and live in a net-zero environment.
- Transition the built environment to become more carbon-aware in its activities.

# Summary of priority recommendations

## Creating greener homes

1. Given the scale of the challenge in the owner-occupied sector, the Committee should investigate what policy, financial and regulatory levers are available to them to encourage decarbonisation and retrofitting within the owner-occupied tenure.
2. Identify what the cost and fuel poverty implications of such a transition away from fossil fuel powered energy systems would have on the end user, especially with a priority being those in social housing.
3. The role of any future hydrogen-based fuel systems, as demonstrated in the [UK Governments Hydrogen Strategy](#), and the potential to expand the role of heat pumps within Welsh homes.
4. Understand the currently capacity, and likely transition to a clean electricity grid to support any electric boilers.
5. Opportunities to promote consumer awareness about the tools, products, services and financial support available to them to have greener lives. That's why, for example, RICS recently published the [RICS Low Carbon Homes Consumer Guide for Wales](#) and are working with stakeholders to promote this guide to homeowners.
6. The role financial grants or loans can play in encouraging homeowners to undertake decarbonisation measures.
7. Expanding minimum energy efficacy standards (MEES) across all housing tenures while ensuring such a system does not create stranded properties.
8. The imbalance in taxation. While powers over VAT are not devolved, the Scottish Government have already called for UK Government to reform VAT in favour of decarbonisation of existing buildings. At present, new build properties benefit from VAT tax breaks, whereas works to decarbonise existing buildings pay VAT. [Recent research by CBI Economics for RICS and the Federation of Master Builders highlights](#) shows that cutting VAT on home retrofitting work will not only create greener homes but also support a £9 billion economic

stimulus to the UK.

9. Ensure local planning authorities are properly funded as they face increasingly complex planning applications, with a greater emphasis on sustainability, and yet, continue to operate with significantly reduced budgets and resources.

### **Climate change and the non-domestic sector**

10. Assess the short-medium term implications the shift to remote working has on domestic energy performance. With two-thirds of Welsh homes currently rates below EPC C, poorly insulated homes combined with higher domestic energy usage will likely offset environmental benefits from commuting and office working.
11. Evaluate the impact reduced office usage has on non-domestic energy demand.
12. Explore what policy levers are available to the Welsh Government to encourage the decarbonisation and energy efficiency improvement of existing commercial buildings.

13. Investigate opportunities to repurpose commercial properties to meet future housing needs – reducing the need for disposing of buildings and supporting the circular economy while addressing the need for new homes.

### **21<sup>st</sup> Century Infrastructure**

14. Understand the opportunities to embed carbon measurement within public sector procurement for infrastructure projects.
15. Explore the expansion of MMC across all sectors of the built environment as a method of creating greener projects which support the foundational economy.
16. Investigate expanding EV charging points at domestic properties and in publicly available locations.
17. Work with industry bodies to accurately assess where skills gaps and risks exist to support future investment in early education, upskilling and green professional development.

# Creating greener homes

While, rightfully, the Welsh Government committed to the construction of greener homes, there needs to be a seismic shift in how we approach decarbonisation in the existing housing stock. To demonstrate the scale of the challenge, in 2020, over 85% of new build homes in Wales were already built to EPC A or B standards.

However, data collected by MHCLG shows that of the number of EPC assessments undertaken in Wales in 2020, less than 2% of existing homes surveyed rated EPC A or B - not since 2015 has that figure been above 2%.

Different tenures present different risks and opportunities to tackle climate change. Social housing already benefits from the WDQR 2021 and the private rental sector through MEES. The owner-occupied sector however is where there is the biggest challenge and requires joined-up thinking between not just this committee, but also the Local Government & Housing Committee and partners at a UK level.

## **Opportunities to retrofit and decarbonise private homes**

As highlighted above, the owner-occupied sector represents a significant challenge and if Welsh Government is to take imminent action to address climate change, they need to commit to initiatives to support private homeowners.

Optimised Retrofit is already demonstrating some of the challenges and opportunities presented by the need to create greener homes, but the focus of this programme is on a heavily regulated, and thus easier to influence, part of the housing sector.

In looking to decarbonise and seek energy efficiency improvements in existing homes, the Committee needs to explore all levers available to the Welsh Government – including financial, planning and regulatory systems. RICS research through the VALUER Project indicates that while general awareness of the need to create greener homes needs to increase with homeowners, the greatest challenge is motivating them to pay for such work. This is particularly difficult given the generally high cost of green innovation such as solar PV, heat pumps and batteries against the generally low financial returns available.

The previous Welsh Government did invest heavily in improvements to the social and private rental sectors of the housing market, but unfortunately, there has been a limited movement within the owner-occupied sector. RICS recommends:

- **Given the scale of the challenge in the owner-occupied sector, the Committee investigates what policy, financial and regulatory levers are available to them to encourage decarbonisation and retrofitting within the owner-occupied tenure.**

## Heat transformation

The Welsh Government have already announced ambitious proposals to transition from fossil fuel heating systems in homes to greener, cleaner methods. The aim is not new, rather it follows similar announcements from governments around the world.

The transition away from gas to greener, electric boilers (assuming the energy source, such as the grid, is decarbonised) represents a cost challenge for the end user. Currently the average cost of gas per kWh is 4p, whereas electricity is closer to 16p per kWh if not higher. This would represent increased heating costs for consumers and risks driving up fuel poverty.

Indeed, under the current EPC rating methodology, it's not uncommon for a switch from a gas to electric boiler to decrease the EPC rating as a result of the operational-cost implications. The Committee should:

- **Identify what the cost and fuel poverty implications of such a transition away from fossil fuel powered energy systems would have on the end user, especially with a priority being those in social housing.**

Switching to cleaner heating systems also needs to be supported by investment in creating more energy efficient homes, otherwise the environmental (and the limited financial) benefits of a greener boiler would be offset by a poorly insulated home or even occupier behaviour.

There are also several other challenges the Committee should investigate as part of the Welsh Government's move away from fossil fuel heating for homes. Different heating systems present different challenges and opportunities – for example hydrogen is an increasingly popular source and in some cases gas boilers can be transitioned to run off hydrogen (whereas electric boilers largely cannot). Consumer behaviour is also paramount to creating greener homes through initiatives such as switching to eco-mode enabled white goods and installing smart controls and monitoring systems.



To further support the Welsh Government's target to move away from fossil fuel heating, we recommend the Committee inquire about:

- The role of any future hydrogen-based fuel systems, as demonstrated in the [UK Governments Hydrogen Strategy](#), and the potential to expand the role of heat pumps within Welsh homes.
- The currently capacity, and transition to a clean electricity grid to support any electric boilers.
- Opportunities to promote consumer awareness about the tools, products, services and financial support available to them to have greener lives. That's why, for example, RICS recently published the [RICS Low Carbon Homes Consumer Guide for Wales](#) and are working with stakeholders to promote this guide to homeowners.

## Funding, taxation & regulation

At present, various financial support packages (many of which are means tested) and advice services exist to help incentivise the decarbonisation of existing Welsh homes.

Research RICS is undertaking as part of the VALUER Project is discovering that financial incentives including grants will not, alone, provide a significant step change in helping to decarbonise homes. Instead, governments should take a holistic approach for levers to create greener homes – this includes combining financial incentives, with an increase in consumer education/communication for the importance of creating greener homes, and increased regulation, targets and risk of penalties.

RICS recommends that in the immediate future, the Committee explores:

- The role financial grants or loans can play in encouraging homeowners to undertake decarbonisation measures.
- Expanding minimum energy efficacy standards (MEES) across all housing tenures while ensuring such a system does not create stranded properties.
- The imbalance in taxation. While powers over VAT are not devolved, the Scottish Government have already called for UK Government to reform VAT in favour of decarbonisation of existing buildings. At present, new build properties benefit from VAT tax breaks, whereas works to decarbonise existing buildings pay VAT. [Recent research](#)

[by CBI Economics for RICS and the Federation of Master Builders highlights](#) that cutting VAT on home retrofitting work will not only create greener homes but also support a £9 billion economic stimulus to the UK.

Properly funding planning authorities which are facing increasingly complex planning applications, with a greater emphasis on sustainability and yet continue to operate with significantly reduced budgets and resources.

## Climate change and our changing high street

The COVID-19 pandemic has demonstrated the important relationship between Welsh high streets and climate change and infrastructure. Repurposing of commercial units, active travel and the expansion of remote working are just a few examples of how COVID-19 has accelerated an increasingly popular trend over the last few years.

### 30% permanent remote working proposals

Since the start of the pandemic, attitudes towards remote working have witnessed a dramatic shift by both employees and employers. Along with technological investments and enhancements, remote working has also demonstrated the ability for businesses to continue to operate in some form of 'business as usual', without the requirement of a 9-5 office approach.

The Welsh Government's ambition to achieve 30% remote working across Wales is a landmark announcement not yet repeated by almost any other government in the world. However, as RICS explained in our [response to the Economy, Infrastructure & Skills Committee](#) at the start of 2021, while there will be obvious social, financial and environmental benefits, greater scrutiny is needed to fully assess the implication of these proposals under the Climate Change, Environment, and Infrastructure Committee remit. In our response to the Committee at the time, RICS recommended:

- **Assessing the short-medium term implications of the shift to remote working on domestic energy usage.** With two-thirds of Welsh homes currently rates below EPC C, poorly insulated homes combined with higher domestic energy usage will likely offset environmental benefits from commuting and office working.

- **Evaluate the impact reduced office usage has on non-domestic energy demand.** At present, there is very little data to compare pre-Covid office energy use to a post-pandemic world. The International Building Operational Standard has been developed as a means to allow organisations to assess, among other features, the environmental running cost of a building. This will help building managers to design optimum workplaces to reduce energy consumption and wastage. Importantly, this will also help to utilise existing building stock rather than focus on disposing and construction, ultimately supporting the circular economy.

### **Creating greener commercial properties**

Unlike other elements of the built environment sector, commercial property has very little regulation, or indeed incentive to decarbonise. Whereas the domestic sector benefits from greater EPC regulations and timeframes, few targets or incentives exist to tackle the environmental impact of the commercial property sector despite its significant contribution towards climate change. RICS recommends the committee:

- **Explore what policy levers are available to the Welsh Government to encourage the decarbonisation and energy efficiency improvement of existing commercial buildings.**
- **Investigate opportunities to repurpose commercial properties to meet future housing needs – reducing the need for disposing of buildings and supporting the circular economy while addressing the need for new homes.**

## 21<sup>st</sup> Century Infrastructure

A modern infrastructure system, fit for future generations, will be paramount to the success of Wales in tackling climate change and environmental damage. When looking at infrastructure, there are four priority areas RICS identified as part of our calls for the new Welsh Government; embodied carbon and measurement; technological enhancements, and the need to develop a future workforce to deliver on these needs.

### **Reducing our carbon footprint**

Measuring and reducing embodied and operational carbon is a growing interest and service being offered by construction and property professionals. One of the common themes in the sector is the lack of consistency in carbon measuring. Without a consistent benchmark for

measuring carbon, it will be extremely difficult for the sector to accurately design and implement carbon reduction in construction and building management. The Committee should:

- **Understand the opportunities to embed carbon measurement within public sector procurement for infrastructure projects.**

An example the Committee might be interested in for measuring carbon is the [International Cost Management Reporting Standards \(ICMS3\)](#), which seeks to factor carbon costings into infrastructure projects and utilise [the Buildings Carbon Database](#) to identify suitable materials for project use based on embodied carbon. This is being designed in conjunction with RICS and coalition partners including the Chartered Institute of Building (CIOB), Chartered Institution of Building Services Engineers (CIBSE), The Environment Agency, UK Green Building Council (UKGBC), Institution of Civil Engineers (ICE), Institution of Structural Engineers (IStructE), Royal Institute of British Architects (RIBA) and The Carbon Trust.

### **Technological enhancements**

The previous and current Welsh Government have already made commitments towards expanding modern methods of construction (MMC) in house building. Benefits of MMC extend beyond simply addressing the need to create more homes, but also supports the upskilling of workers, job creation and reduces the carbon footprint of manufacturing.

It is increasingly common to see MMC being extended to other parts of the construction sector to aid design, assembly and operational efficiencies. Several hospitals in England for example are already embracing MMC as part of their expansion programmes. The Committee should:

- **Explore the expansion of MMC across all sectors of the built environment as a method of creating greener projects which support the foundational economy.**

As electric vehicles become lower in purchase cost, there will be a surge in demand for EV charging points. Parts of Wales still suffers from EV charging blackholes and urban areas will need to see a significant scale-up in charging point installation. The Committee should:

- **Investigate expanding EV charging points at domestic properties and in publicly available locations.**

### **Future skills and resource to deliver on a greener Wales**

Skills shortages are frequently highlighted as an area of concern in Wales when it comes to tackling climate change. From a built environment perspective, there has been a pent-up shortage of professionals available for some time – across all specialisms.



In September 2021, the Built Environment GCSE was launched in Wales which is the first of its kind in the UK to really capture and inspire younger generations to take an interest in where we live and work, and how these communities are built. There remains however, a serious skills shortage (combined with an aging workforce) to tackle matters which influence our ability to combat climate change including retrofit surveying, land management, civil engineering and modern digital connectivity. The Committee should:

- **Work with industry bodies to accurately assess where skills gaps and risks exist to support future investment in early education, upskilling and green professional development.**

Yours sincerely,

Samuel Rees  
Public Affairs Officer Wales, RICS