

Energy Performance and The New Homes Ombudsman

Introduction

In August 2019 MIMA responded to the Ministry of Housing, Communities and Local Government's (MHCLG's) consultation on proposals for a New Homes Ombudsman.

That consultation noted that much impressive work is being carried out by the housebuilding industry and its suppliers to improve the quality of new housing, but also that the number of snags and defects being reported remains high¹.

One of the concerns MIMA raised in our response was that the kind of defects and issues reported by homebuyers to housebuilders, and then potentially to the Ombudsman in future, are most likely those that are visible to them. As Which? put it, "*wonky light switches or incomplete sealant*". It is less clear whether issues affecting a building's energy performance, such as poorly installed insulation, are being picked up.

For example, would an average homeowner know if the right amount of insulation has been installed in their loft, or whether gaps in their insulation could be causing reduced thermal performance? How would a homeowner be able to tell if the right cavity barriers are in place to help prevent the spread of fire?

MIMA's main point in the consultation response was that "*the functional performance of new homes, including the thermal and acoustic performance, and their ability to resist the spread of fire is just as important, if not more important than the visible defects.*"

So, we were pleased that the Government's response to the consultation confirmed that "energy performance" would be within the remit of the New Homes Ombudsman, as well as more typical defects. As part of the development of the new framework it will be vital to set out for consumers how this aspect of the scheme will work in practice².

MHCLG February 2020

"We will expect the New Homes Ombudsman's remit to include complaints involving fuel, energy and broadband performance where expectations fall below that which is required or promised to be delivered by developers³."

¹ 94% in 2019/20. 25% reported 16 or more defects. See [S030a - HBF 2021 Brochure - V5.pdf](#)

² See more on page 5 below.

³ See [Redress for Purchasers of New Build Homes and the New Homes Ombudsman: Summary of responses to the consultation and the Government's response \(publishing.service.gov.uk\)](#)

As well as having practical benefits for consumers who do discover poor performance and succeed in getting this rectified, requiring the Ombudsman to look at disputes in this area will also send a powerful signal to the industry that real energy performance matters.

The phenomenon of the energy and carbon “performance gap”, the issue of homes requiring more energy to heat and power them than models predict, is already well understood. This gap – often found to be 40% or more - may be caused by installation issues such as air gaps behind insulation boards, imperfect modelling, or a range of other systemic problems in construction processes⁴.

In-use building energy performance will become even more important once the 2025 Future Homes Standard is implemented. As more new homes will have low carbon heating systems, it will become essential for the building fabric to perform well in reality. Low carbon heating technologies often work best when radiators and heating elements run at lower temperatures than conventional boilers. Hence properties should be well insulated and draft-proofed to maintain comfort levels.

Improving the quality, safety and performance of buildings is a top priority for our members, and MIMA has provided extensive input into many government and industry quality-related programmes and policies over the years. We believe quality is not only hugely important for homebuyers, but also for reputable businesses operating in the sector. The announcement on energy performance is therefore an important and welcome development.

Preparations and de-risking

Stewart Baseley, executive chair of the Home Builders Federation, said in May 2020: *“The [New Homes Quality Board] will help ensure that the steady improvement in the quality of new build homes we have seen in recent years continues. Customers will be reassured that in the instances where they do have issues with their new home, they will have recourse to a fast, effective independent dispute resolution service via an ombudsman. The new robust arrangements will provide a huge challenge for builders but the industry fully recognises the need to deliver, and we will⁵.”*

In our view, taking steps to ensure a building performs as intended should have excellent reputational benefits for the housebuilding industry, especially given that the energy performance of new builds is a particular selling point.

National New Home Customer Satisfaction Survey published March 2021⁶
“Energy efficiency standards in new homes are some of the best in the world and are continuing to improve further with challenging Government targets in place for new homes moving forward. On average, new build homes are already roughly 65% more energy efficient than an equivalent Victorian house.”

⁴ See [Performance Gap Project - End of Term Report Launched | Zero Carbon Hub](#)

⁵ See [New Homes Quality Board - interim board launched \(hbf.co.uk\)](#)

⁶ See [S030a - HBF 2021 Brochure - V5.pdf](#)

“New homes built in the UK are roughly 50% cheaper to run per year than the equivalent Victorian house. That could mean an annual saving of £440 for a 1-bed ground floor flat, and £1,410 for a 4-bed detached house.”

Verifying performance

Many experts and organisations support the types of ideas covered in this paper, including the Climate Change Committee who re-emphasised in February 2019⁷ the vital importance of focusing on the real performance of new buildings, recommending major changes to current policy and legal frameworks to create a step change in quality and to be able to give consumers assurances that their homes are performing as intended. They called for an *“overhaul of the compliance and enforcement framework so that it is outcomes-based (focussing on performance of homes once built), places risk with those able to control it, and provides transparent information and a clear audit trail, with effective oversight and sanctions...”*

The Business, Energy and Industrial Strategy Parliamentary Committee agreed in their recent report on energy efficiency⁸: *“It is not sufficient for Building Regulations to delineate what builders should do, without any robust procedures that require builders to prove what they have done, their quality control processes and to test whether the dwelling performs to the standard required.”*

The Government’s new “EPC Action Plan”⁹ suggests movement in the right direction: *“In order to ensure greenhouse gas reduction and energy efficiency goals are met, consumers, government and third parties will need to have greater confidence that changes to a building which improve EPC ratings will have a measurable effect on energy use. In the short term, this will be through actions set out above to improve EPC reliability, but in the longer-term broader changes are needed...EPCs will need to move from a reflection of the features of a building (fabric, services and installed improvement measures) to a true measure of ‘in use’ building performance. This can be based on more sophisticated building modelling that takes actual energy consumption into account (while remaining a measure of building performance and not occupant behaviour). The Committee on Climate Change specifically recommended in their 2018 and 2019 progress reports that EPCs need to reflect real-world performance.”*

Of course, the verification of performance is dependent on having suitable metrics, tools and technologies, and the ability to use them at scale, as emphasised in the recent State of the Nation report published by Building Performance Network¹⁰.

The co-heating test¹¹, which provides an assessment of the “as-built” performance of buildings by measuring the heat that is lost through the elements of the building fabric - has been used extensively in a research context for building performance

⁷ See <https://www.theccc.org.uk/publication/uk-housing-fit-for-the-future/>

⁸ See <https://publications.parliament.uk/pa/cm201719/cmselect/cmbeis/1730/1730.pdf>

⁹ See [Energy Performance Certificates for buildings: action plan \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/414442/energy-performance-certificates-for-buildings-action-plan.pdf)

¹⁰ See [Home - BPN \(building-performance.network\)](https://www.building-performance-network.com/home-bpn/)

¹¹ See [Co-heating test - Designing Buildings Wiki](https://www.wikidwelling.org/wiki/Co-heating_test)

evaluation. However, more widespread use has been limited to date for practical reasons. Hence, initiatives such as SMETER¹², the Government's programme to "invest up to £5 million to develop, test and demonstrate technologies that measure the thermal performance of homes using smart meter and other data" shows promise.

The competition focuses on the evaluation of new tools to measure the thermal efficiency of homes. The programme will test and demonstrate tools that can measure the Heat Transfer Coefficient (HTC) of a home using its energy consumption data plus other information about the building.

The Department for Business, Energy and Industrial Strategy states "there is great interest in alternative options for measuring the thermal performance of homes in situ while they are occupied. One such option is to use smart meter data plus other data such as temperature to calculate the HTC." SMETER products are, at present, are intended to measure the whole-house HTC of homes with gas as their primary heating fuel.

Eight projects initially secured funding in this competition.

- Building Research Establishment
- EDF
- Hoare Lea LLP
- Centre for Sustainable Energy
- PassivSystems
- Build Test Solution
- Switchee
- CAR

Knauf Energy Solutions (a sister company of MIMA member Knauf Insulation) also participated in the SMETER scheme and has developed proven measurement and verification services which are now coming to market for new build and retrofit projects¹³.

Our understanding is that the results of the SMETER programme are due to be reported in 2021. We believe it is essential for the New Homes Ombudsman to engage with the findings, as well as other recent research, standards and guidance on building performance evaluation. Frameworks will be needed to support housebuilders in demonstrating to homebuyers that they are getting the energy performance the building was designed to deliver.

Opportunities for the New Homes Ombudsman

The New Homes Ombudsman is due to be operational in late 2021¹⁴, underpinned

¹² See [Smart Meter Enabled Thermal Efficiency Ratings \(SMETER\) Innovation Programme - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/smart-meter-enabled-thermal-efficiency-ratings-smeter-innovation-programme)

¹³ See [Knauf Energy Solutions](https://www.knauf-ceilings.com/en/knauf-energy-solutions/)

¹⁴ The Building Safety Bill contains powers to establish the New Homes Ombudsman and is currently passing through Parliament [Draft Building Safety Bill - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/building-safety-bill)

by a New Homes Code currently being developed by the New Homes Quality Board, Chaired by Natalie Elphicke MP OBE¹⁵.

Now is the time to develop the building energy performance elements of the Ombudsman's remit, hand-in-hand with work being carried out on the SMETER Programme, and potentially the Future Homes Standard too. Indeed, the timing of the launch of the New Homes Ombudsman will likely mean that any measurement and verification elements of the Future Homes Standard will not have been finalised, and so there is the opportunity to be a trailblazer in this area.

In MIMA's view the new Ombudsman's requirements on energy performance would need to set out the following, as a minimum:

- 1) **How a homebuyer would identify whether their property is under-performing in terms of its energy performance.** For example, it will be important to be able to differentiate between scenarios when a household is using more energy than was estimated for their building because they are a "higher-than-average energy user", or because there is another problem, such as with the fabric performance which is causing them to use more heat than expected to keep warm.
- 2) **How to ensure that the process of verifying that an energy performance problem exists remains as light-touch as possible.** For example, if a housebuilder has an approved process in place for checking and verifying the energy performance of their schemes, this would be an excellent place to start. Having such a verification process should reduce the chance of a complaint in the first place, but if a complaint is made, it should be far easier to address.
- 3) **If a genuine performance issue is found to exist, what happens next and where the responsibility for fixing defects lies.** The scheme should set out the reasonable actions to be taken/outcomes to be achieved for both the homebuyer and the housebuilder. Again, this should avoid becoming overly prescriptive, allowing the parties to find solutions that suit them, whilst being clear about what compliance looks like.
- 4) **How the Ombudsman's requirements on energy performance will interact with standards and best practice guidance produced by other organisations or bodies.** For example, some local authorities are beginning to set quantified building energy and carbon performance standards. Also, the British Standards Institute, with the help of the Building Performance Network, is in the process of developing a Building Performance Evaluation (BPE) standard¹⁶, and the Home-Grown Homes Project in Wales has recently published a detailed BPE guide¹⁷.

MIMA welcomes this progress and feels strongly that future policies and requirements on the measurement and verification of energy performance should permit the industry

¹⁵ See [Independent body to champion new home quality and consumer redress launches - New Homes Quality Board \(NHQB\)](#)

¹⁶ See [British Standard for Building Performance Evaluation - BPN \(building-performance.network\)](#)

¹⁷ See [BPE_guidance_final.pdf \(woodknowledge.wales\)](#)

to trial and find solutions that work for them, within clear, agreed parameters and not require a single, specific measurement technology to be used.

Looking forward

Many new homes in the future will use electricity instead of gas for heating, and so tackling the performance gap and encouraging the measurement and verification of in use performance will become even more important. Every extra, unanticipated unit of electricity needed to heat a leaky home would come at roughly four times the price of a gas-heated home.

And for consumers, routinely measuring energy performance has the potential to shift the risk of a poor install from the homebuyer to the supply chain, while bringing through measurement tools to allow that supply chain to manage and mitigate that risk. Such an approach promises a far smoother transition to a low carbon housing stock while also reducing potential issues associated with the transition to electric heating.

The New Homes Ombudsman can help to pave the way for a transition towards the measurement and verification of real performance, setting the agenda and rules in collaboration with industry and the Government, as well as supporting housebuilders in mitigating associated risks. In essence, assist in preparing the industry to deal with complaints related to energy use and outline what actions are deemed reasonable.

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