

Energy Security and Net Zero Committee

Oral evidence: [Heating our homes](#), HC 115

Wednesday 31 January 2024

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Members present: Angus Brendan MacNeil (Chair); Vicky Ford; Barry Gardiner; Mark Garnier; Mark Pawsey; Derek Thomas.

Questions 383 - 500

Witnesses

I: Jonathan Bean, Policy and Parliament Lead, Fuel Poverty Action; Zoe Guijarro, Principal Policy Manager, Citizens Advice; Charles Roe, Director of Mortgages, UK Finance.

II: Simon Bones, CEO and Founder, Genous; Dr Richard Hauxwell-Baldwin, Research and Campaigns Manager, MCS Foundation; and Phil Mason, Head of Regulatory Engagement, TrustMark.

Written evidence from witnesses:

- [Fuel Poverty Action](#)
- [Citizens Advice](#)
- [Genous](#)
- [MCS Foundation](#)
- [TrustMark](#)



Examination of witnesses

Witnesses: Jonathan Bean, Zoe Guijarro and Charles Roe.

Q383 **Chair:** Good morning and welcome to the Energy Security and Net Zero Committee and our fourth session on heating our homes—consumers, finance and certification. This morning we again have two panels of three. Our first panel is here and waiting, eager to go, and I will start by asking you to introduce yourselves—name, rank and serial number—as you please.

Jonathan Bean: I am Jonathan Bean from Fuel Poverty Action.

Zoe Guijarro: My name is Zoe Guijarro. I am the Principal Policy Manager at Citizens Advice.

Charles Roe: Charles Roe, Director of Mortgages at UK Finance.

Q384 **Chair:** Thank you for being here this morning. Jonathan Bean, the Government have committed to reviewing the UK's fuel poverty strategy. Do you think the Government still believe they can achieve their fuel poverty targets by 2030 and 2035, that we know of?

Jonathan Bean: We are pretty sceptical that targets are going to be hit. Progress is incredibly slow. If you look at the latest reports and projections of fuel poverty, numbers remain very high and, despite some efforts on retrofitting, that is not moving at the speed it needs to move at. Pricing remains high. Obviously, fuel poverty is driven by a combination of poor housing and high energy prices—

Q385 **Chair:** For the record, remind us where the Government said they would be in 2030 and where you think they will be in 2030.

Jonathan Bean: At the moment we are seeing very incremental progress. We are a grassroots organisation and we have not modelled it in detail because we do not have access to the data and resources to do that, but we are looking at very slow progress. With the current trajectory of pricing and the speed of retrofitting, we do not see any significant improvement.

Q386 **Chair:** Would anybody else like to add what they think about Government targets and where they might be? Does anyone think they will be met?

Zoe Guijarro: We agree with Fuel Poverty Action. Progress on energy efficiency measures, which is one of the key ways to help people in fuel poverty, has been painfully slow. We think there is a need to home in and focus on what people in fuel poverty and on low incomes need to help them improve their properties.

Q387 **Chair:** Why do you think progress is painfully slow? Do the Government see this as a cost rather than an ultimate saving? You hear many people say that we will save on the UK's energy demand and on the demands that poor housing puts on the health service. Why is progress slow?



HOUSE OF COMMONS

Zoe Guijarro: The Government have put in an increasing amount of finance but it is still not back to the levels of 10 or 15 years ago. It is still not adequate.

We have seen a stop-start of schemes, which has not helped, and that has impacted the supply chain. As we do more and more homes, it gets increasingly difficult to find people who require energy efficiency measures. We also see people not having agency to make the changes; perhaps they are in the private rented sector and it would be really difficult for them to approach their landlord to have these measures put in. Other feedback we get is that it can be quite hard to navigate these schemes to find out what people are eligible for. From previous polling that we have done of consumers, often a lot of people do not even know that the schemes exist in the first place, which is a big problem.

Q388 **Chair:** Charles Roe, given what Zoe said about the stop-start and the lack of a pipeline of work, do you think it is a pipe dream that private finance might be interested in efforts to tackle fuel poverty when the Government seem to be quite interested in it one day and to row back on it another day? Are the signals being sent by Government consistent enough to interest private finance?

Charles Roe: When we look at the Government's approach to net zero and improving the energy efficiency of homes in the UK, one of the things that UK Finance is looking at and what our members are looking for is certainty. I think it is fair to say that over the last two or three years, the Government and the Department have issued a number of policy statements about their intent and where they want to get to. We have already seen some of those deadlines for improving the energy performance of homes pushed out to the right, for very good and very just reasons.

However, as Zoe said, in terms of delivering the messages there is a need for a co-ordinated approach, not just across the banking industry but from the Government, the energy suppliers and the retrofitting industry, as well as people like TrustMark, who I understand will be on the panel after us. We need to make sure that there is a co-ordinated voice and approach in terms of what needs to happen and by when, and, at the same time, that no homeowner, regardless of whether they are a landlord or a homeowner themselves, is left behind. We know that for some homes and some homeowners, making the transition will be very difficult.

Q389 **Chair:** Do all those sectors you mentioned have full trust when the Government say something, or do they expect the Government to change what they have said within a matter of months?

Charles Roe: What we would like to see—and this is something that we called out in our "Net Zero Homes" report that we published in November 2022—is the Government working together with various parts of the infrastructure within the energy efficiency and home improvement markets to come up with a co-ordinated approach so that there is



HOUSE OF COMMONS

certainty for all the players involved. I think the issue at the moment is that while the Government do provide elements of grants and support for homeowners, it is not clear what needs to happen and by when and who is eligible. Also, at the moment, homeowners are uncertain about what is the best energy efficiency measure they should put in. For many homes in the UK, the right initial change to make your home more energy efficient is not putting in ground-source heating or a heat pump, but basic things like putting insulation in your roof or potentially looking at double glazing.

Chair: A fabric change.

Charles Roe: Yes, a fabric change.

Q390 **Chair:** The final question from me is about the overall cost. My view—and certainly challenge it if you think it is wrong—is that overall, in the round, this will save the UK money in the longer term, whether in heating homes now or NHS health costs afterwards. Is that a general view, or, because the arm of the Government doing the up-front costs sees this only as a cost, do they not see the fuller picture? Can you tell us what the fuller picture is, all three of you, in your view?

Jonathan Bean: As Charles was saying, we need to be smart about what we are focusing on doing. Millions of homes still do not have loft insulation, which is a very simple and relatively cheap intervention. The idea of just having something like an ECO4 scheme that is very expensive—

Q391 **Chair:** Yes, but is all this work ultimately a cost or a saving in the round for the UK?

Jonathan Bean: It will be a massive saving. Obviously, we need to reduce energy consumption. We are still struggling to deliver enough cheap energy to deal with the transition. Energy efficiency must be seen as an investment both for households and for the country.

Chair: It is a financial saving.

Jonathan Bean: Yes, it is an investment. The human cost and the economic cost are not talked about enough. The impact on millions of essentially having your life dominated by the struggle to pay your energy bills and keep your home warm is psychologically and physically damaging, so there is the impact on the NHS but also the impact on lives.

Q392 **Chair:** Zoe and Charles, just briefly, is it a cost or a saving in the round?

Zoe Guijarro: Yes, there would be a saving. The Climate Change Committee has done a lot of modelling, which shows that the cost of inaction is greater than the cost of action.

Chair: And that is a financial saving as opposed to a carbon saving.

Zoe Guijarro: Yes, a financial saving.



HOUSE OF COMMONS

Charles Roe: It needs a co-ordinated approach across DLUHC, the Department for Energy Security and Net Zero and the NHS looking at it in the round. At the moment, it seems to be done in silos rather than being looked at across the whole piece in terms of the benefits it delivers for everybody.

Q393 **Mark Pawsey:** I want to ask about criteria and standards, and I want to start with the decent homes standard. In our evidence so far we have had a lot of comments that the current standard is not fit for purpose and that 23% of homes currently fail the standard. Zoe, how would you change the decent homes standard? What is wrong with it and how could it be made better?

Zoe Guijarro: With any standards, the key is making sure that they are enforced and followed up on. We have a variety of standards: the decent homes standard, the housing health and safety rating system, the minimum energy efficiency standard—we have all these standards to try to help improve homes.

Q394 **Mark Pawsey:** Are there too many standards? Could they sensibly be amalgamated?

Zoe Guijarro: That is not something we have looked into but it would definitely warrant review. Back when HHSRS was introduced, I understood that that would eventually become the most important standard, but the decent homes standard has remained. There is definitely a case for reviewing—

Q395 **Mark Pawsey:** How would you change it?

Zoe Guijarro: How would I change it?

Mark Pawsey: How would your organisation change it?

Zoe Guijarro: It goes back to enforcement. There is nothing necessarily wrong with the standard; if no one is checking on it—

Mark Pawsey: You are happy with current standard but the failure to enforce it is the issue.

Zoe Guijarro: Yes.

Q396 **Mark Pawsey:** Jonathan, do you agree?

Jonathan Bean: We also need to make sure that any standards set cover things such as mould growth. Recent research suggests that about 16% of homes have mould issues, which have huge impacts on health.

Q397 **Mark Pawsey:** Is it easily measured?

Jonathan Bean: Well, I think if you go into a home, you can pretty quickly see mould. We have all seen—

Q398 **Mark Pawsey:** There would be a question of extent, wouldn't there?

Jonathan Bean: Yes.



HOUSE OF COMMONS

Q399 **Mark Pawsey:** So how would we determine the criteria? Just a little bit of mould or a whole load of mould? How would you measure it?

Jonathan Bean: You would need to assess what is driving that. Is it a lack of ventilation? One problem is that a lot of changes to homes do not take account of the need to ventilate. There would need to be an assessment of what was causing it and how to solve it, not just—

Mark Pawsey: Its existence.

Jonathan Bean: Yes.

Q400 **Mark Pawsey:** Okay. Charles, do you have any thoughts on the decent homes standard and how that could change?

Charles Roe: I think there are changes that could be made in terms of some of the things that the wider public are more familiar with. We talk about the energy performance certificate, which looks at energy usage, yet the Government's target is to reduce energy emissions in terms of improving a home's carbon footprint. This is where there is confusion. Landlords and homeowners are being targeted to improve EPC ratings but the Government are talking about net zero and driving down carbon emissions. This is where the Government could work to say, "This is what our target is; we need to make sure we have the measures in place for that."

Q401 **Mark Pawsey:** What is your view of the effectiveness of the EPC? Is it simply "old home bad, new home slightly better"?

Charles Roe: Not necessarily. For some old homes, the EPC rating can be a very good measure of where they are in terms of their energy usage, but we know that it is very difficult to make some old homes more carbon efficient, and the UK has the oldest housing stock in Europe.

Q402 **Mark Pawsey:** Do you think the consumer understands it when they are offered a home and are told what its EPC rating is? Do they understand the significance of it?

Charles Roe: That comes back to the education piece about what the Government are trying to do. There are examples, as I am sure the other panellists will be aware, of homeowners improving the energy performance of their house in terms of carbon footprint but their EPC rating has gone down. From the point of view of any incentives from banks to lend on properties with A, B or C energy performance certificates, we can see that they are doing the right thing but it is going the wrong way from the point of view of the EPC rating.

Q403 **Mark Pawsey:** Zoe, when Citizens Advice engages with people looking for social housing and they are offered a property with a certain EPC rating, do they know what your advisers are talking about?

Zoe Guijarro: I would say that most people probably do not, but I think that is because it is not necessarily front of mind for people when they are looking for a property.



HOUSE OF COMMONS

Mark Pawsey: They are more bothered about location and access to services.

Zoe Guijarro: Yes. I think it goes back to what Charles was saying about the broader piece that we need. We need a national campaign around net zero and all the elements that will come together to push us forward on the transition. Understanding what changes need to happen in your home will be a key part of that, and thinking about how EPCs fit into that will be key.

Over the years, EPCs have suffered from being devalued. We have seen that estate agents, landlords and others who are not that keen on them do not push them front and centre. They will have them and show them because that is what they are supposed to do by law, but they are not really front and centre. It would be interesting to see if people are thinking about them more now in the context of running costs, with high energy bills. I think they could be made to have a real value if they are reviewed, thinking about whether they measure what we need them to measure and give consumers the information that they need to make decisions, and people such as house sellers, estate agents and the like value them and show them.

Q404 **Mark Pawsey:** Jonathan, EPC rating is one of the criteria for support, as is income, but the criteria do not look at people's individual health conditions. Should they?

Jonathan Bean: They do not look at health conditions, which obviously have a massive impact on how vulnerable people are.

Going back a stage, we do not think EPCs are fit for purpose. Given the quality of the way they are currently done, you can have very similar flats in the same block with ratings ranging from D to F. I live in one example of that. They are done for £50 and are often done for the sale of a property.

Q405 **Mark Pawsey:** They are too simplistic.

Jonathan Bean: I think there is also a lack of clarity about what they are for. Are they for your bills? Are they giving you a guide about how expensive it will be to heat your home, which is obviously incredibly important for fuel poverty? Or are they about the carbon? People are very muddled. Even people much closer to these things are muddled about the degree to which they are about how much it is going to cost you to stay warm versus how efficient your home is from a carbon point of view. We need to get a much better read on individual homes and the people living in them. The quality of the information we have is incredibly poor. We do not know where vulnerable people are. We do not know how warm homes are. Basic information is completely lacking and that is why so many people are suffering.

Q406 **Mark Pawsey:** Are the criteria of income and EPC rating just too simplistic to get support to the people who need it most?



HOUSE OF COMMONS

Jonathan Bean: Absolutely. I think everyone agrees the EPC is flawed and needs changing, so basing the whole system on that as a fundamental driver is a major problem.

Q407 **Barry Gardiner:** I am interested in the ways in which energy tariffs and the retail market could do two things: address fuel poverty, and address and reduce emissions. Do you feel that the energy companies are responding fast enough in delivering innovative tariffs that could incentivise the market?

Jonathan Bean: Some innovative tariffs are starting to come through. I think everyone has probably seen, for example, that Octopus and many of the suppliers have EV tariffs. The problem we see is that a lot of the innovative tariffs are aimed at higher-income groups, more tech-savvy groups, offering them much cheaper energy, so a lot of the innovation we see at the moment is increasing energy inequality rather than helping the people who are suffering most from fuel poverty. We are actually very worried by innovation, because those households—people on tracker agile tariffs or EV tariffs, for example—are paying about half what fuel-poor people are. Someone on an Economy 7 tariff in an electric-only home, for example, who is much more likely to be poor and vulnerable, is paying double what someone on an EV tariff would be paying. There is a lack of regulation by Ofgem to protect the people who need protecting, and innovation is, in many cases, increasing energy inequality. We are very worried about that.

Q408 **Barry Gardiner:** You have brought Ofgem into the picture. Is it failing, as you would describe it, because it just has not focused on it properly, or is it failing because is it legally constrained in what it can do?

Jonathan Bean: I think there are issues about the role of Ofgem versus what requires legislation, but I think a lack of focus is one of the problems. Let me give one example. On 1 January, one major supplier increased Economy 7 night heating by 91%. Now, there was nothing from Ofgem. Right in the middle of winter, people will be freezing to death as a result of that shift and with no time to respond to it. Ofgem can do some things, even within its current powers, we believe. Some things require legislation but we think that vulnerable groups are not being protected and that Ofgem is really just not tracking these things in the way it should be.

Q409 **Barry Gardiner:** What I am asking you for, I suppose, are recommendations, first that this Committee can make about what Ofgem should be doing at the moment and, secondly, for ways in which Ofgem should perhaps be freed up to do more in this area to address it.

Jonathan Bean: To give one example—

Barry Gardiner: I would rather have a recommendation.

Jonathan Bean: One recommendation would be to, for example, get rid of standing charges, which I know is something that the Committee has looked at. That would protect people—



HOUSE OF COMMONS

Chair: And recommended.

Jonathan Bean: Indeed; you have recommended it.

We have something called Energy For All, which is about providing essential energy to protect all homes. There is a chance to do innovation but protecting people who really need protecting, rather than innovation among the energy elite. Energy For All provides everyone with the essential energy to keep their homes warm and safe, which essentially is what this Committee is trying to do, enabling people to afford to heat their homes. If we provided everyone with essential energy, it would be the opposite of the current system, in which people are charged £300 for no energy at all. We think there is a need for radical change and that companies cannot be left to do the right innovation because they are profit-maximising and will obviously try to get high energy users and more affluent households. Those are the groups that will be more profitable for them, so it is not surprising that that is where the innovation is happening.

Q410 **Barry Gardiner:** Ms Guijarro, you are from CAB and have made recommendations on the social tariff. In your view, what reforms to the retail market would allow for greater innovation in the home heating sector?

Zoe Guijarro: I can understand why getting rid of standing charges is a very attractive recommendation. We come at it from a slightly different angle. We do believe that the Government need to review the need for long-term support for consumers in the energy market or we are just going to have an affordability crisis every winter. That could ensure that the warm home discount, for example, better reflects pricing, whether up or down. Reducing standing charges is attractive but would only save a relatively small amount for some consumers.

Q411 **Barry Gardiner:** You have proposed a social tariff. Take us through that and tell us how you feel that would help.

Zoe Guijarro: What we proposed was target price support. I suppose you could characterise that as a social tariff but you can slice it in different ways. One way would be to have a warm home discount that is expanded and tiered based on low and high energy needs. We think that moving around things like standing charges would just move money between consumers, and that high energy users would end up worse off than they already are rather than paying fixed costs through a standing charge. We did a major study last year called "Fairer, warmer, cheaper". I can share the full details of that with the Committee; it was run by a colleague.

Q412 **Barry Gardiner:** Okay. Mr Roe, given the scale of interventions that would enable the private sector to collaborate more effectively to bring a greater range of products and services to customers, how would you like to see that market develop?



HOUSE OF COMMONS

Charles Roe: One thing that mortgage providers and lenders want to ensure is that the transition to net zero for any homeowner is fair and just and that no homeowner is left behind. You only have to look at the cost of retrofitting a two-bedroom terraced property. Whether it is in the south-east or the north of England, the cost is similar, but in terms of the value of the property, you will find it is disproportionately higher in the north of England than it is down in the south. We would like to see some innovation, whether that is heat as a service or the private sector funding the retrofitting or the installation of heat pumps for fuel-poor households—

Q413 **Barry Gardiner:** Lloyds Bank has done its collaboration with Octopus, hasn't it, where it is giving £1,000 cashback for insulating and heat pumps?

Charles Roe: Yes.

Barry Gardiner: But you are talking about—I am trying to fish for the word that you used; sorry, my mind has gone blank.

Charles Roe: Heat as a service.

Barry Gardiner: Yes, heat as a service. Just cash out what that actually means. Consumers think, "Well, my utilities are a service," but what more do you mean by "heat as a service"? How does that change the tariff and the retail infrastructure?

Charles Roe: Potentially, the role that Ofgem could play in this is by encouraging either private finance or energy suppliers to install heat pumps in properties, and then part of the tariff that the homeowners pay for the use of the energy goes to repay the loan that went in in the first place. So they are paying a slightly higher unit cost, but the overall cost of their energy bills comes down and they can get energy efficient measures in their homes at the same time.

Q414 **Chair:** Turning back to EPCs, people are unhappy about them and do not understand what they mean. Probably nobody knows. I won't put anybody in the room on the spot, but—

Mark Garnier: Can you tell us, Angus?

Chair: No. I didn't want myself on the spot either.

Basically, we are looking for something that people understand, like a ratio of how much a house leaks, how much energy you put into a house before you need to put energy into it again, and how long a house can hold a temperature of 20°C before you need to put energy into it again or hold it within a certain temperature range. Is that the sort of thing we are looking for when we are talking about EPCs?

It is an energy performance thing, but this banding is not telling you anything about energy performance. First, it says something about energy performance, but then you have to go and look again at what the bands might mean, and it is not readily knowable when you see bands A, B, C and D which direction they are going. Is A better than B or is B



HOUSE OF COMMONS

better than A? A layperson has to go through a second bit of learning. If you had an efficiency number on a home or a space, based on the energy put in and the energy lost, would that be better? Has anybody given any thought to what could replace EPCs as they currently are?

Jonathan Bean: We do need to separate the bill aspect from the carbon aspect. The bill aspect within the EPC is a good thing but the quality of the information is variable. People do need to know what it is going to cost them to heat their homes, given the heating system and fabric in place. We think that part needs to be maintained but the quality of the information needs to be much better. There is a complete disconnect between how much energy the EPCs claim there is and what Ofgem sees as consumption. We think the bill part should be maintained as well as the carbon part.

Q415 **Chair:** Simply, aren't there are just two elements to it: the volume you have got to be heat and how long it will hold that energy?

Jonathan Bean: Yes.

Q416 **Chair:** That is basically what you are looking for in energy performance. If you are heating a room—with its high ceilings, the volume of this room is obviously a lot more than of your average living room—how long the energy will be held in that space says a lot about its performance.

Jonathan Bean: Yes, that is the heat loss calculation, but you also need to know the cost of heat. For example, in an electric-only home—as you know, the cost of electricity is four times the cost of gas. It is really important that we do not just look at heat loss; we have to look at the cost of putting heat in. Most of the millions of people we talk to—people who are effectively in energy starvation—cannot even put heat into their home, let alone worry about how much leaks out. We do need to maintain very clear sight of the cost of the inputs as well.

Q417 **Chair:** Once you bring in those two variables, you are talking about the cost of one energy going in versus a different energy going in and then the performance of the space that you are heating. Would it not be better to look at those two things distinctly, to be aware of the space you are heating and then make the choice of energy separate?

Jonathan Bean: Yes, exactly. What is the cost of putting heat into the house, given the heating system in place, and then how much of that heat is leaking out? Exactly. At the moment, those things are being confused in how people see EPCs. I think having the elements clear and separate would help a lot.

Q418 **Chair:** The cost to heat the space and then the retention of that heat. Would the panel generally agree with that? Rather than having a letter grade on the side of a washing machine or whatever, you would separate those two things and give people two bits of information, one for heating the space and then for the retention of heat in the space.

Zoe Guijarro: It will come down to how you effectively communicate that to consumers so that they can easily digest it and understand it. I



HOUSE OF COMMONS

agree with Jonathan that running costs do need to be a key part of that, because that is what people tend to focus on. But, yes, how you communicate the heat loss will be critical.

Charles Roe: I hear what the other panellists are saying. My concern, and the concern our members would have, is with the confusion that potentially introducing a third measure would create for homeowners. We are talking about energy efficiency, the heat escape, and we still have the Government's target in terms of net zero transition and making homes more energy efficient and reducing their carbon footprint. We would need, I think, to look at all three to see which one has most resonance with the homeowner and then at how that is communicated to homeowners in an impartial and unbiased way so that they know it is information that they can rely on.

Q419 **Chair:** Surely household energy efficiency can be looked at as kilowatts in versus kilowatts out. When you look at an engine or whatever, you are looking at whatever fuel you put in versus whatever work you get out.

Charles Roe: I couldn't comment on how the homeowner would interpret that and what they would see as the driver for improving the energy efficiency of their home and making the transition to invest £15,000 to install a heat pump to make their home more energy efficient. Is it a reduced energy cost, which is unlikely—you are not likely to get a reduction in your energy cost—or a reduction in carbon footprint, which is the driver we see at the moment?

Q420 **Chair:** Say the consumer was to understand that 0% was the North Pole and 100% was the Sahara desert and that a certain number—obviously, you would be looking at getting nearer 100%. Do you think the consumer would manage to process that?

Charles Roe: If it was an easy way for the consumer to digest it I think they would, but we have to make sure that it is a consistent measure. You referred to your washing machine. I think most homeowners would recognise that a washing machine with an energy rating of A is more efficient than one rated G. If we could continue something along those lines, I think it would help with consistency.

Q421 **Chair:** When things go wrong for consumers, do the Government understand the role that strong, clear consumer protections can play in delivering the retrofit of homes at pace and scale? There is a bit of upheaval involved for people.

Charles Roe: Very much so. One of the areas we focused on in the report that we produced in November 2022 was the need to upskill tradespeople and the trades to be able to do retrofitting at scale and pace to meet the future demand, and not just to upskill to the numbers of people required—to make this transition, at least 100,000 tradespeople will be required in the first instance—but to make sure that the installations are being done to a level recognised by TrustMark or similar accreditation. Homeowners must know that they are investing in a product that will be acceptable in the long term, and reliable, and that it



HOUSE OF COMMONS

will not be installed by cowboys. One of the concerns that lenders have is that unless homeowners can get that impartial advice, the transition has the potential for unscrupulous tradespeople to sell people products that they do not need, are not appropriate and are overpriced.

Q422 **Chair:** Ms Guijarro, what would you say?

Zoe Guijarro: The existing consumer protection landscape is way too complicated for consumers, with a plethora of codes and schemes and quality marks, and that has led to gaps in protection. The CMA found similarly in its latest report—that the levels and robustness of standards, monitoring processes, complaints handling and financial protections all need to be strengthened.

Going back to what Charles was just saying about advice and information, even though we have schemes such as TrustMark and MCS—I know they both work very hard—consumers do not recognise those brands. If people are having work done under one of the Government schemes where you have to use an MCS-accredited installer, that is great. But if someone is self-funding, they will not be looking for MCS or TrustMark because they do not know that they exist. They will go out and get a few quotes and probably going with either the middle one or the cheapest one.

Q423 **Chair:** My colleague Vicky Ford often goes on about “show and tell” when you have something positive, but isn’t the show and tell of something negative an even stronger message? If you are upgrading your home and something goes wrong, the message that ripples around is, “Don’t go near that.”

Zoe Guijarro: Yes, consumer protections really do help to build trust in the market. One of the side effects we have seen with the stop-start of schemes is that it has created more space for rogue traders to operate. There is a lack of consumers knowing what protections are—

Q424 **Chair:** Who should be there protecting the consumer? Should it be left to the consumer themselves to try to enforce this, or should somebody be coming along to say, “That’s not right”?

Zoe Guijarro: We need a single mandatory scheme similar to Gas Safe. I am not saying it has to be the same, but for any energy efficiency and low-carbon heating measures that go in, your installer needs to be accredited regardless of how that is funded.

Q425 **Mark Garnier:** Can I follow up on that point before I get to the main thrust of my question, which is about money?

On this whole business of rogue traders and cowboy builders, if I could just put it on the record, I had a private Member’s Bill to try to bring a licensing scheme for exactly that, in order to protect consumers. Just to be absolutely clear, it is astonishing the lack of enthusiasm by the Government to bring this about in order to protect people. As a loyal Back Bencher of the Conservative party, I say that they should pull their bloody finger out. It is ridiculous that people are still being affected by



HOUSE OF COMMONS

this when there is a solution to it. Right, rant over.

Charles, can I get into the nuts and bolts of the financing of this whole thing? Let's divide this question into two elements. One is the retention of energy, which is insulation, and the other is the cost of energy. Let's start with the cost of energy. This is following on from Barry's earlier point about power as a service.

It is really good to see that E.ON is coming in and doing this. I was an investment banker and a hedge fund manager, now a politician—I haven't got many friends. There are examples out there of how the financial services institutions have come about to do some really clever things. At a big scale, when Rolls-Royce sells an engine to an airline, it sells it as a package of the engine itself and a service package, so the airline is buying power by the hour. Ditto when you buy a car; you go along and buy a car by the mile, depending on where you are. It is only just now that we have seen E.ON do energy as a service and the Octopus thing that Barry was talking about. What has got in the way of doing this? It does not matter whether it is an old-fashioned boiler or you are buying a new heat pump—why does it not work? What is getting in the way of financial services institutions to take such a long time to come to this solution?

Charles Roe: I think it is the cost in the first place—that initial cost. You can buy a new gas boiler for a property and have it installed in the UK for about £2,000. If you are installing a heat pump, the installation of the heat pump is just one element. You then have to look at the fabric. You generally have to change the radiators in the property. The cost is probably about £15,000 to £18,000.

Q426 **Mark Garnier:** The alternative is a mortgage, but none the less it comes back to the same point. At the end of the day—this is the jet engine analogy—it doesn't matter whether it is £15,000 or £2,000, ultimately you have a huge cost to put the thing in, which is a burden, but you can attribute that cost to the household on the usage of energy. You could increase the cost of the energy by 2 pence per unit or whatever and that sticks with it for a fixed period, which could be 30 years; it would go with the house when it is sold. I take your point, but you are clever guys. You are speaking on behalf of the investment banker community. You are some of the finest brains in the world—

Barry Gardiner: Steady on!

Chair: You'll be claiming you're a rocket scientist next.

Mark Garnier: Well, I'd give it my best. But you do see my point. There are some really smart people who have not come up with this yet, and I cannot understand why. It is an obvious opportunity for banks to make money.

Chair: What, the bankers have missed the obvious? Okay.

Charles Roe: There is that opportunity. It is that transition, as I was saying—it is the novelty factor. It is all very new. If you go back to the



HOUSE OF COMMONS

example you used of car leasing, up until probably nine or 10 years ago, if you wanted to buy a car, you would either take out a personal loan or you would hire it through a car scheme, funded through your work. The reason the car-leasing arrangements and HPI came out was to try to encourage people to buy a new car, or have access to a new car, because the benefits of a company car allowance were being withdrawn. That is the transition that we need to have a look at, but we must also look at it from the point of view of the long-term investment requirement. It could be for the insurance or pension funds as well.

Q427 Mark Garnier: Sure, exactly. Any number of different investors would see an opportunity to come in and do this.

On the car thing, what I am thinking about is not necessarily the leasing but the balloon thing where you buy it and as long as you stick to below 10,000 miles or whatever, and you haven't dinged it and so on, you can then hand the car back.

I suppose the big question is: do the Government need to do anything to incentivise this? My view is that I don't think they do but if I have that wrong—

Charles Roe: Anything the Government can do to help incentivise innovation in these sectors would be great, whether in terms of reducing VAT for the homeowner, for example, so there is a quid pro quo—it is only 5% on energy use, but to get that benefit—to make that transition. Or it could be something to do with stamp duty. If a homeowner goes down that route and has recently purchased the property—we know that most people will make these expensive investments within two years of moving in—and makes that transition, they could get a rebate on their stamp duty within two years. That could be the incentive. It is also the consumer demand for it.

Q428 Mark Garnier: Turning to the retention of energy, the insulation thing, that is slightly different because you cannot necessarily attribute it to a power-by-the-hour thing, so you do have to think about getting a mortgage if you want to do it. I have seen occasions when people have got a mortgage of £10,000, lined the inside of their roof with this gunk stuff and it turns out that it makes it all mouldy inside the house, so you cannot get a mortgage on it in the future when somebody else wants to come and buy it, so you have to get another mortgage for £10,000 to clean it out. There are a whole load of complicated things there, but, again, when it comes to that retention of energy—that insulation—is there anything that the Government should be doing to try to ease it? I can see that this is a slightly more difficult one; this is where you do have to invest in your property and you may not want to do that.

Charles Roe: There are two elements: investing in the property and investing in the time and the disruption that you go through to improve the energy efficiency of your home. For many homes in the UK—single-skin homes—it is very difficult to improve energy efficiency without significant disruption to the property.



HOUSE OF COMMONS

I go back to what Zoe and Jonathan were saying. Having an accredited installer programme—whether it is TrustMark or something similar, and whether it is insurance backed, as we see with NHBC and new-build properties—that has that support and homeowners can buy into and recognise is the way to do it, to ensure that homeowners are installing a product that they know is going to be installed by reputable tradespeople.

Q429 **Mark Garnier:** Back to the licensing of builders. Zoe and Jonathan, I have been talking money to the money guy, but do you have anything to add?

Zoe Guijarro: There is definitely a place for innovative products and services to do exactly as you described, and we definitely need to see the private sector come forward with those kinds of things. We have concerns, which need to be worked through, about these bundled products and services. We do not want them to lead to consumers being locked into long-term contracts that they do not understand. Going back to the advice piece that I talked about, this is about making sure that consumers have access to impartial advice so that they can make the right decisions for their homes.

Q430 **Mark Garnier:** That should be covered, though, by the Financial Services Act 2012, with the registration of financial advisers.

Zoe Guijarro: I would hope so. We just need to make sure that no one is falling between the gaps.

Charles Roe: Financial advisers can only advise on regulated products—financial products. The products we are talking about here do not fall under financial products, and financial advisers and/or mortgage advisers could not advise on what is the right product for a homeowner to have installed. That is a really important point.

Q431 **Mark Garnier:** You are talking about which heat pump to have installed.

Charles Roe: Which heat pump or whether it would be more efficient.

Mark Garnier: But they would have to be regulated in order to give advice about the financing of it.

Charles Roe: About the financing side, yes.

Q432 **Mark Garnier:** If I remember rightly, a bank would have to—do they have some sort of responsibility? I am just trying to think back.

Charles Roe: There is the consumer duty, implemented from July last year, where banks have a responsibility for making sure that homeowners receive good-quality products and services.

Q433 **Mark Garnier:** So an answer to this could hypothetically be that a bank could only provide one of these services—be it a mortgage or a power-by-the-hour type of thing—to a product that is being installed by a licensed installer.



HOUSE OF COMMONS

Charles Roe: That could be one way of doing it. Or the bank could have a relationship with an advice agency and it could say, "We are XYZ Bank. We are using ABC Intermediary to advise you on energy efficiency for your property. We believe that they are a credible agency and able to advise you," and you would go through that route. The agency would give you the advice and say that you need to borrow £20,000 to update your property, then you would go and speak to the mortgage adviser and they would see what they could do for you.

Chair: Given that Mark Pawsey was best in class and out before his allotted time, I will give him another minute.

Q434 **Mark Pawsey:** With some of these innovative products, is there a way that the energy company or the financial company could enter into a contract with the contractor carrying out the work? It seems to me that one of the biggest obstacles to people improving the insulation in their own homes is the lack of trust. Zoe, you spoke about that. If the homeowner were to enter into a contract with the financial provider, who would then, in turn, appoint the contractor, or with the energy company, people would be more inclined to do it. Would that overcome the fear of, "I've got to talk to all these people and some of them may be good and some of them won't be any good and I won't know and I may end up with a bad one"? If these financial providers or energy companies were to enter into the contract with the installers, a company failing to do a good job would risk a very substantial income flow. Why is that not happening?

Charles Roe: We are already seeing it. I have seen it with some local councils taking an innovative approach and contracting with, for example, solar panel installers and saying, "We would like you to work on behalf of this local authority." The local authority will then go back to all the council taxpayers in the area and say, "We have signed up with this solar energy provider to put solar panels on your roof. We have done all the due diligence. We believe they are trustworthy. By coming out to all the homeowners, we can get a good price. You know that you are going to get a quality job." Then it is up to the homeowner to say, "Yes, I would like to follow up with this company."

Q435 **Mark Pawsey:** To Mark Garnier's point, would the financial providers stand in that place, and would the energy companies? These are big, trusted institutions that an intending supplier would not dare let down.

Charles Roe: Certainly, a number of banks are doing that. We see certainly the larger ones, and some of the smaller ones, teaming up and partnering with those sorts of agencies, definitely.

Q436 **Vicky Ford:** I think the mortgage market has failed consumers in this area. Before I start, please, Charles, you have to be accurate with your data. You just said it cost £15,000 to put in a heat pump. The gentleman behind you, who represents the sector and who is about to give evidence, winced. I don't think that is an accurate figure, not from what I have heard more recently. Please be accurate. You are in a very important and influential position. Okay?



HOUSE OF COMMONS

Charles Roe: Of course.

Vicky Ford: We know that two thirds of properties with cavity walls do not have cavity wall insulation. That is about 6 million homes. We know that one third of houses with lofts do not have loft insulation; that is 8.5 million homes. Let's say loft insulation takes two years to pay for itself. Cavity wall insulation takes five years to pay for itself. Some will be more; some will be less. I put it to you that the vast majority of those houses will have mortgage lenders who know about the time value of money, who could have said at the time they remortgaged that property last, "Why don't you borrow a little bit more and you will have your money back within two years, within five years?" I put it to you that a responsible mortgage lender should offer that service.

Now, assuming that we are in a dream world where the energy performance certificate give an accurate measure of savings, where people trust contractors, and where the Bank of England Monetary Policy Committee drops rates tomorrow to give confidence back to borrowing, do you agree with me that mortgage lenders could be doing more to help people make these investments and save money?

Charles Roe: You make a very good point about the role of mortgage lenders in helping to finance this. Just in terms of helping to understand some of the issues they face, only 40% of the homes in the UK have a mortgage on them, so the 60% of homes—

Vicky Ford: I will take 40% of 6 million homes with cavity walls uninsulated and the 8.5 million—that is, what, 6 million homes between the two, maybe a few less.

Charles Roe: Well, 40%, then. I go back to the comments my colleagues on the panel made earlier about homeowners being confused about what they need to do. According to research that lenders have done, for many homeowners, investing in cavity wall insulation or taking additional funding to install insulation in their roof space is not a tangible reward. Homeowners generally like to borrow extra money to install a new kitchen or to have an extension—

Q437 **Vicky Ford:** Do you agree with me that if there was trust in the market and the banks and mortgage lenders—I mean, people trust Nationwide, albeit not necessarily everybody else, but they do borrow money from them. Do you agree that if they gave people the trust and made it a point of remortgaging to have this conversation, then, potentially, a few of those millions of homes could have benefited?

Charles Roe: It comes back to public awareness. There are large lenders—you mentioned one of them there—that have come up with an innovative scheme, interest-free loans, to help existing mortgage holders to upgrade their properties.

Q438 **Vicky Ford:** If we worked on improving the trust and the certificates, do you think we could unlock something? Do you think there is more that could be done to work with the banks and the mortgage lenders to make



HOUSE OF COMMONS

this happen?

Charles Roe: I think there is work that could be done. I would also say that we should not forget that over the course of the last 18 months or two years—

Q439 **Vicky Ford:** What if I said that every mortgage provider had to do a new EPC on a home every time they give out a remortgage offer?

Charles Roe: We would have to have a look at that and discuss the approach to it with our members. The reason I say that—

Q440 **Vicky Ford:** Otherwise it is going to come back to public money. Let's assume that we want to help homeowners to save money—you are a money man—and retrofit their homes. What incentives do you think could help homeowners to save money?

Charles Roe: As I said at the beginning, this is an issue that needs to be solved by the various parties that play in this space. The energy companies have a part to play in it as well. The finance companies and mortgage lenders can help to fund it for homeowners who want to do it and discussions can be held when they are receiving mortgage advice. We must remember that 84% of mortgages are advised through mortgage intermediaries so the opportunity to work with mortgage intermediaries is there. At the end of the day, however, it will be down to the consumer, the person seeking the mortgage, whether they want to take a further advance, and affordability—

Q441 **Vicky Ford:** Could tax make a difference? Would reducing VAT make a difference?

Charles Roe: It could make a small difference. There is an element of affordability for homeowners.

Q442 **Vicky Ford:** Do you think that fundamentally mortgage providers do not have an interest in helping people to save money because that would mean that they would repay their mortgages sooner?

Charles Roe: I disagree with that. Mortgage companies and mortgage lenders are incentivised by the regulator from the point of view of improving the energy performance ratings of their mortgage books and they are looking to do that. They are working very hard with the various sectors to improve them.

Q443 **Vicky Ford:** That is only on the initial sale or purchase, not on a remortgage, isn't it?

Charles Roe: No, it will be, because they have to improve energy performance across the whole of their mortgage books. It is not just existing mortgages; it is remortgages as well.

Q444 **Vicky Ford:** I wonder if any of the others on the panel have views on local authorities helping to set up schemes to help private homeowners to participate in mass retrofit. We know retrofit has happened a lot in social rental but it has not happened a lot for private owners. Is there any view



HOUSE OF COMMONS

on that from Zoe or Jonathan?

Zoe Guijarro: Yes, there is definitely value in looking at different delivery models, and local delivery, whether that is by local authorities or other local actors, would be a key part of that. Several years ago there was a lot of talk about having a street-by-street approach, going down a street and identifying who would be entitled to ECO, for example, or who would want the boiler upgrade scheme. Maybe because it was being done en masse, it could be done more cheaply and, therefore, people who had to fund it themselves would get it at a cheaper rate. We are at the point now where we need to do so many homes and we need to consider what different delivery models could help us.

Q445 **Vicky Ford:** Have any local authorities done this well, that you are aware of?

Zoe Guijarro: Not that I am aware of.

Vicky Ford: Jonathan?

Jonathan Bean: I totally agree that we need to move to a different model. The model we have at the moment is very much opening the door for cowboys to do very poor-quality jobs and the huge impacts from that. We do need to get local authorities to take control of it. One of the key steps is getting enough people with skills, as Charles mentioned earlier. We need a huge number of people to deliver it, and that is the starting point. Until we have enough skilled contractors, we will not be in the position to do the street-by-street approach, which does make sense but we need the people with the skills.

Vicky Ford: I do not want to diss the building trade because the vast majority of contractors are great. The problem is that you get one or two and they set a bad reputation.

Jonathan Bean: But 10% going horribly wrong is going to massively undermine this whole thing, and that is what we have to stop.

Q446 **Vicky Ford:** Charles, back to my question about trying to get more financial help at the point of remortgage, to think, "Can I be saving money by making investments now?", have you looked at whether other countries are doing more of that? Are other countries more successful at helping homeowners to afford those investments?

Charles Roe: I am not aware of any countries that have had more success with making the transition.

Q447 **Vicky Ford:** Do you think that in your position as Director of Mortgages at UK Finance, representing the UK banking and finance industry, you could look at what other countries are doing to see if there is something you might want to report back to us as interesting?

Charles Roe: I will certainly look and see what we can do.

Vicky Ford: Thank you.



Chair: Thank you, panel. That brings us to the end of the first session this morning. Thank you all—Jonathan Bean, Zoe Guijarro and Charles Roe—for your time and expertise.

Examination of witnesses

Witnesses: Simon Bones, Dr Richard Hauxwell-Baldwin and Phil Mason.

Q448 **Chair:** Welcome to the second panel today in our fourth session on heating our homes—consumers, finance and certification. We again have three witnesses, and I will ask them to introduce themselves.

Simon Bones: Simon Bones. I am the Chief Executive of Genous, which is a digital home retrofit business. I am also a visiting research fellow at the University of Bristol in climate change science and I used to run an international consulting business.

Chair: Genous seems to have a very interesting website where you can start and finish and see your home all the way through, I think.

Simon Bones: Yes, I can talk more about that.

Chair: Very good.

Dr Hauxwell-Baldwin: I am Richard Hauxwell-Baldwin, the Research and Campaigns Manager for the MCS foundation.

Phil Mason: Good morning. I am Phil Mason. I am the Head of Regulatory Engagement with TrustMark, which is the Government-endorsed quality scheme for home improvement.

Chair: Thank you all. To kick off the session, I will turn to Vicky Ford.

Q449 **Vicky Ford:** Simon, we have heard that the most expensive aspect of installing a heat pump is the process of selling it to consumers in the first place. Have the Government done enough to make information about the benefits of low-carbon technologies available to consumers? Have we done enough to tell people?

Simon Bones: I think there is very little information that the Government or others have made public about heat pumps. The information has tended to focus on the basics, that it works like a fridge in reverse, rather than understanding the relative efficiencies and the ability to heat homes. Lots of people, including some of the previous panellists, believe that heat pumps cannot heat old buildings, for example, which is not true. Therefore, I think there is a long way to go on the gap between what heat pumps can do and what people believe they can do.

Q450 **Vicky Ford:** We just heard the representative of the UK financial sector say that it costs £15,000 to put a heat pump in your home. Does the panel agree with that number?



HOUSE OF COMMONS

Simon Bones: No.

Q451 **Vicky Ford:** Okay. Richard, tell me how you see that number.

Dr Hauxwell-Baldwin: Based on MCS installation data for 2023, the average price is £12,500. Now, £2,500 might not seem much but it is significant in the context first of accuracy and, secondly, when you then factor in Government grants like the boiler upgrade scheme.

Q452 **Vicky Ford:** How much does it cost? It is £12,500 and then the grant is what?

Dr Hauxwell-Baldwin: It is £7,500, so that brings it down to £5,000. I think reference was made to a boiler costing about £2,000. I would challenge that £2,000 is an accurate figure. Either way, we are looking at a figure in the region of £5,000 for a homeowner to get a full system. That is going to include the heat pump, any upgrades, and so on, so it is the average cost for the installation.

Vicky Ford: Heat pumps, new radiators—

Dr Hauxwell-Baldwin: Yes.

Vicky Ford: Underfloor heating? No.

Dr Hauxwell-Baldwin: The average price is £12,500 and that will incorporate all registered installations. When it comes to the information and advice piece, whether we are talking about the costs, the benefits, how they work, and so on, there is a real lack. We need to move into a world where this is normalised, and there needs to be consistent messaging coming from Government, from local government, from your neighbours who have received heat pumps. It needs to be consistent.

Back in 2020 the foundation produced a report called “Energising Advice”, which showed very clearly that there is a bit of a postcode lottery around information provision. What it concluded, which we do not have and which we have been strongly calling for, is a national information resource that provides expert advice, is updated, covers all the relevant technologies and so on, modelled on, for example, Home Energy Scotland, Nest in Wales or, if we want to look to our European neighbours, France.

France has been incredibly successful at taking a very holistic approach to heat pump promotion. I am not going to go into the poor French that I have here, but there is a national retrofit scheme and there are national retrofit advice services provided by Government, promoted by Government, supported by local and regional one-stop shops. It goes all the way down: information provision—

Q453 **Vicky Ford:** I know you want to tell me lots, but I want to make sure that both the other gentlemen have a chance, so just narrow your words.

Simon, you said no, and you were saying more about this misinformation that loads and loads of homes in the UK could not benefit. Could you just



HOUSE OF COMMONS

clarify what you think is the situation?

Simon Bones: To answer your first question first, the thing on the cost of the heat pump is that it varies. The average is as Richard says. If you have a 6 kW unit going into a house with a system boiler, which is a like-for-like swap, it is very simple. If you have a double unit, which you might require if you have a heat load over, let's say, 14 kW, it is going to cost you £20,000, £30,000 or £40,000.

Q454 **Vicky Ford:** What is the cheapest?

Simon Bones: I believe there are providers offering about £500 after BUS if your house perfectly fits it and it is a 6 kW unit. The most expensive we have put in for air source is £50,000.

Q455 **Vicky Ford:** We often hear the message that British homes are not suitable for heat pumps—people making that generalisation. How many British homes do you think are suitable for heat pumps?

Simon Bones: In most cases they are suitable, but the issue is the economics. If you run a heat pump at a high flow temperature, it is less efficient—other things being equal—than if you run it at a low flow temperature. If you have a well-built house with underfloor heating and you run it at 40°, you will get a much better return than running it at 60° or 65°. You can get heat pumps that run at 60° or 65° and the Energy Saving Trust recommends that if you have a gas boiler you turn it down to 65°, so the numbers are about the same.

Q456 **Vicky Ford:** What proportion of homes do you think could have more efficient, cheaper energy through adopting this technology?

Simon Bones: That is a slightly different question because the efficiency—

Q457 **Vicky Ford:** Okay, I will come back to that. Phil, how do we tackle this misinformation and better signpost people so that they know they are getting trusted advice?

Phil Mason: I think TrustMark has a function to play in that and we are well placed. There is a further dimension of complexity beyond just the cost of a heat pump installation. We know that somewhere in the region of 40% of dwellings in the UK are traditionally built, which means they are going to have solid walls, and a high percentage of those properties will need to become heat pump ready before we can put a heat pump in and have it effectively operate. There is more than just the cost of the heat pump. There is the cost of the preparation of the dwelling to make it ready to support a heat pump.

Q458 **Vicky Ford:** How do you get this better advice service so people know that when they go and get advice on their home, for all these different measures, they can trust it?

Phil Mason: We have a process. There is cost attached to it. There is a process called PAS 2035, which was introduced in 2019. It is used under



HOUSE OF COMMONS

the Government-funded schemes and ECO, and they foot the bill for the cost of delivery.

Q459 **Vicky Ford:** Are there too many of these trusted—TrustMark here, somebody else there, and so on?

Phil Mason: I think it is a busy landscape. Whether there are too many and whether they are all trustworthy and all have compliance at the back of it is perhaps a different question. The process of PAS 2035 is about giving people advice at the right time through the process so they understand what they can do, how they can do it and what the outcomes are, and those are based on the objectives of the property owners as well.

Q460 **Vicky Ford:** Richard mentioned Scotland, Wales and France providing better-quality information to consumers.

Phil Mason: I am not an expert on schemes outside the UK and I would tend to treat Scotland and Wales the same as how we would operate here in England. This process can apply across all those environments, where there is bespoke, tailored advice given to the property owner about how it will work for that particular house and the way that they use it.

Q461 **Vicky Ford:** You think it is fine—that there are advice services out there and people should trust them.

Phil Mason: No, I don't think it is fine. There is a complicated landscape, and the proper quality and practical deliveries need to be drawn out and pushed to the forefront, and they need to be used and recognised and trusted by the public.

Q462 **Vicky Ford:** Briefly, because I have run out of time: how do we design an information service that people have confidence in rather than this very cluttered situation?

Dr Hauxwell-Baldwin: I am going to answer that by taking a step back and looking at the broader policy landscape. People make decisions based around confidence and having trust in what they are being told. At the moment there is still a whole range of uncertainties.

Hydrogen is still in the mix. We constantly hear of householders having their boiler serviced, where the engineer comes in and says, "Don't worry, I can just pop that out. You get a hydrogen-ready boiler. That's what you need to do." It is completely understandable that they would do that, because there are higher-ups in their world who are saying, "That's what's coming." If you are a gas engineer, you are not going to say, "Actually, don't take a boiler from me. Go and get yourself a heat pump. Go and speak to someone else." That is the macro-level landscape, where there is this massive uncertainty.

If I am a homeowner and I am being encouraged to be as responsible as possible around energy efficiency and cost and so on, but I am being told that by someone who has serviced my boiler for however long, straightaway there is uncertainty. I would strongly recommend that that



HOUSE OF COMMONS

decision around hydrogen for home heating is brought forward with a very strong message around, "This is where we are going." I know the Government are giving lots of good support for electrification of heat, but that is where it starts. Confidence comes from certainty, including for installers—I know we are going to talk about skills and retraining. It comes from certainty. If I am a homeowner and I am unsure of what is the right thing to do, all this information provision, which is important but in itself will not lead to a decision, will be ineffective.

Simon Bones: I am obviously going to talk up my own book, because that is what Genous does, but I would say that I think that, if they try to be that advisory function, the Government will fail. It is enormously complicated. It requires a lot of technology skill, and a lot of insight into how homes work. I don't believe the Government will be able to do it, and I do not think it is the Government's role.

Q463 **Chair:** Picking up on that, what can Genous do? This is your shop window opportunity. What can Genous do that the Government cannot do? You say you start from the beginning and go to the end, and you have alluded to looking at other factors as well.

Simon Bones: If we look at how we advise customers—and it is worth saying that most of our customers are at the wealthier end, so I have less experience than the previous panel, for example, of people in fuel poverty. If you are looking to do this at scale for homeowners who are predominantly the largest emitters and most likely to do this work themselves, I think you have to be digital in your approach, or as digital as possible, because otherwise we will not be able to hire enough people who know what they are doing to advise on this.

I think it is really important that the economics—I started to allude to this in response to Vicky's questions. Fundamentally, the thing about retrofit that no one has mentioned so far today is that for most people who own a house it is a really good financial investment. Mark will like this. I have never done a retrofit advice where I cannot save the homeowner 7% post-tax—assuming that they pay tax on their energy.

Q464 **Chair:** With the work you do and the digital analysis you do on people's homes, and given what we are hearing about heat pumps, would you always come out in favour of a heat pump?

Simon Bones: Not always. It depends on what the homeowner wants. This is where I am not supportive of local—

Chair: Let's forget what the homeowner wants; let's see what is energy efficient.

Simon Bones: Yes, so what is the most energy efficient? If you look at putting in a relatively low-efficiency, cheaper heat pump and running it at a high temperature, and you are pulling out an 89%-efficient gas boiler—as we have heard, electricity is four times more expensive than gas—you will probably pay more, other things being equal, than you would have done before. If you put in a high-efficiency heat pump, you run it at 40°



HOUSE OF COMMONS

because you have underfloor heating, and you have solar panels that feed that during the winter, you should save a lot of money in almost all cases.

Q465 **Chair:** So it is important to have the solar panels in that mix.

Simon Bones: A heat pump and solar work well together, and most people do not understand the mix. Even—

Q466 **Chair:** You just put the electricity from the solar panel straight into the heat pump, is that what you doing?

Simon Bones: Yes. When your solar panels generate electricity and you sell it back to your retailer, you get somewhere between 5p and 15p typically. That might be slightly higher or slightly lower. When you buy that electricity from them, you are buying it typically—unless you have an innovative tariff—at around 27p, so the more of that electricity that you use yourself, effectively, the better the economics of the solar panels.

Q467 **Chair:** Because it is two to two and a half times more efficient to use an air source heat pump than—

Simon Bones: Well, that is on top of the heat pump being more efficient. That is just saying, rather than giving your retailer back 1,000 kWh at 15p or 5p, you are using it yourself and not using the 27p you would have had to buy anyway. It does not change carbon because you have still generated the electricity, but it does make it work better.

Q468 **Chair:** How long will a heat pump last? The first step that a householder has to go through is the high capital cost of the heat pump versus other things, but the heat pump will have a lifespan. It will have to be replaced again, which is another moment of high capital cost. It will probably be a different heat pump as time moves on, the pipes will not fit in the same place, so it will not be able—whatever. Has anybody looked at the cost of the replacement of a heat pump with a heat pump? How often has that happened? Have we reached times when we have to do that?

Dr Hauxwell-Baldwin: Heat pumps have a lifespan equivalent to or longer than a boiler and—

Chair: How many years?

Dr Hauxwell-Baldwin: About 15, and the unit itself is—well, costs are obviously going to come down. There are various mechanisms, like the clean heat market mechanism, which is precisely designed to ramp up production numbers and drive down costs. The cost of the unit itself depends on the size and complexity of the heat pump, but £3,500 to £5,000 would be the cost of the heat pump itself. But over time—

Q469 **Chair:** Is that with Government assistance or without Government assistance?

Dr Hauxwell-Baldwin: Well, you asked for the replacement cost for the heat pump. That is for the heat pump—the unit itself. In 15 years' time I would imagine it is going to be a lot less expensive. In terms of replacing



HOUSE OF COMMONS

it, part of the embedded cost of a heat pump system is that it may involve upgrading pipe work or changing radiators, but once you have done that, in the same way as changing a gas boiler system, all the mechanics are there. It is literally a like-for-like swap, as appears in other phraseology. You take it off; you put the new one in. The replacement cost will not be an issue, as and when, allowing for the fact they are going to last for about 15 years.

Q470 Mark Pawsey: Simon, you mentioned that a lot of the people you deal with are at the wealthier end of the sector. Are they doing it because they want to save money or because it is the right thing to do for the environment?

Simon Bones: A mix. One of our clients wrote in an email, "I'm not interested in the polar bears; I want to make some money." I guess my interest is in the polar bears, but I will sell that product because it helps both. If it is done properly, the thing that retrofit can do in most properties is to reduce your carbon and save you money. The barrier, and the reason we generally deal with rich people—which, again, came up in the last session—is that if it costs £15,000 to £25,000 to retrofit your home, most people don't have that behind the sofa.

Q471 Mark Pawsey: In your experience—to pick up Mr Garnier's point from the last session—are there financial institutions ready to fund that from the savings that people are going to make?

Simon Bones: Personally, my view is that heat as a service is overblown, but I do believe that the financial institutions are the key. Taking the point that not all homeowners have mortgages, but a large proportion do and a large proportion of the number of people who would want to retrofit have mortgages, the mortgage companies have been slow, in my view. We are talking to most of them, so I have a reasonable view. They are slow at doing this, because there isn't a direct requirement for them. The most that has been set is a 2030 target for 50% A to C EPCs, and so far as I am aware—and I am not sure on this—I do not believe that there is a fixed carrot or stick in place for what happens if they fail that.

Q472 Mark Pawsey: If there was an obligation to improve standards each time the property was sold, or each time it was remortgaged, do you think that would have a massive impact on the number of owner-occupiers who are looking to do what you would offer them?

Simon Bones: Yes. I do not think you need to wait until it is remortgaged or sold. There are plenty of people who have—

Q473 Mark Pawsey: How would you obligate the homeowner?

Simon Bones: I don't think you can obligate the homeowner, but I think you can obligate the mortgage company by saying, for example, "You have to offer loans, if they satisfy this criteria, at at least the rate that the person has today." Some mortgage companies do have green additional borrowing. I have yet to find one who has it on the front page



HOUSE OF COMMONS

of their website. Most of them, if they don't hide it, don't make it easy to see.

We have many customers who are unaware that their lender will do green additional borrowing and they are not clear whether they will get approved at the end of that process. It is a very cumbersome process for the homeowner, when—and taking the point around cost of capital—the lowest cost of capital here is the house and that is what should be funding this product. If you have a 2.5% or a 0.9% mortgage, then putting that money behind—there is almost nothing that does not deliver a return on it.

Dr Hauxwell-Baldwin: We recently commissioned from YouGov a representative householder sample survey of people's intentions to make energy efficiency improvements to their house and how they were going to pay for them. Of the 2,500 householders, only 40% were planning to do anything in the next two years, and 80% of those were planning to self-fund it, so they were not looking for finance. There is an interesting piece there around why not; we need to understand why they are looking at self-funding. The average spend they were looking at was around £5,000, so we are not talking deep retrofit, we are not talking heat pumps; we are probably talking solar panels.

That 20% is still a sizeable chunk of the population who are considering finance from which to develop some more innovative finance products, but there is definitely a question—the way I often phrase it is that it is not a question of access to finance, but a question of accessing finance. They are two very different things.

Q474 **Mark Pawsey:** Isn't the trigger going to be when people's gas boilers break down? If I want to change my car, my internal combustion engine second-hand car has a value and I can trade it against the electric car. I cannot trade my old gas boiler against a new heat pump because nobody is going to want to buy my old gas boiler, so I am probably only going to change my gas boiler for a heat pump when the gas boiler breaks down. Isn't that the key trigger?

Dr Hauxwell-Baldwin: I think that gets into part of the broader narrative around how we discuss this. Talking about the urgency of retrofit, and this whole energy transition debate, I get to the point where I would slightly agree with Simon: I think national Government have a central role to play here in saying, "This is important; you need to do this."

On the point of a boiler breakdown being the trigger for getting any new form of heating, a DECC report from back in 2013 shows that 70% of boiler replacements are not distress purchases. There are some, but the vast majority are not. What that leads you to is that there is lots of time for information campaigns: "If your boiler is getting old and we have all these other policy certainties in place, go for the heat pump." You have time to plan, and that is when you can then look at, "How do I finance it? Well, I might get a 0% loan subsidised by the Government for the



HOUSE OF COMMONS

remainder of the capital need.” There are lots of different ways of doing that.

Mark Pawsey: Simon is about to tell me that there is a part-exchange scheme for my—

Simon Bones: No, I am not aware of one.

Mark Pawsey: I am sure there isn’t.

Simon Bones: What I was going to say is that I agree with Richard that relatively few people buy a heat pump because their boiler has failed. You generally need to do some other work around it. You have to access subsidy schemes. If your boiler goes down, it tends to happen in winter, you tend to be cold and you tend to want the plumber to come round tomorrow to fix it. For us, it is more people who are taking a green approach or who want to save some money or whose boilers are inefficient and they want to swap them.

Mark Pawsey: Phil, you want to come in.

Phil Mason: I would like to add that while people are planning to retrofit their homes we need to be sure that we do it in the right order. If people are borrowing money and they are investing it without appropriate advice and understanding of what needs to be done, they might carry out work and install measures in the dwelling, but they may find that those need to be undone if they are not done in the right order. It needs to follow a process based on good advice.

Q475 **Mark Pawsey:** That is exactly my question: what is the recourse? Isn’t it the case that one of the reasons why people do not want to go through this process is that they hear, and they read in the *Daily Mail*, about disasters with things that are not installed properly, whether it is the heat pump or the insulation? What recourse do people have? You operate a scheme that provides financial backing, I suspect.

Phil Mason: It provides financial protection, but we work from the principle of “get it right first time”. Should something go wrong, there is a process that results in an ombudsman process at the end of it, and should the installer no longer exist, they will put financial protection against their work, but—

Q476 **Mark Pawsey:** What proportion of installers are covered by your scheme?

Phil Mason: We have just over 15,000 registered businesses currently, and that changes weekly and monthly.

Q477 **Mark Pawsey:** What is the proportion of the total market?

Phil Mason: I am afraid I could not give you a percentage, but it is a relatively low number, because, as Zoe raised earlier, public awareness needs to be improved generally across quality schemes.

Q478 **Mark Pawsey:** How up front are installers that subscribe to your scheme



HOUSE OF COMMONS

at explaining to the consumer that it is essentially an insurance policy that covers you if something does go wrong?

Phil Mason: I think those that participate are extremely good at it because we monitor how standards are delivered. The challenge that exists is the process that we operate, which we have been given through the Each Home Counts review, is very effective in funded schemes, through the Government capital funded schemes and through the energy company obligation, but we need wider awareness in the able-to-pay privately funded sector.

Q479 **Mark Pawsey:** Richard, do you think that people are put off by the accounts that they hear of installations that have not worked well?

Dr Hauxwell-Baldwin: There is a risk in amplifying the bad and generalising that as the norm, and that is certainly not the case. Obviously, this is a chance for me to make the case for MCS as a standards organisation. A heat pump is a system: it has a design component, it has an electrical component and it has a gas component, so it is not quite the same thing as having an electrician come in. The standards are there to engender that sense of confidence.

As an organisation, MCS put its hand up and recognised that it was not doing as well as it could do, so the scheme redesign, which is launching in the summer, is fundamentally designed to address some of those concerns around consumer confidence.

Q480 **Mark Pawsey:** Is your message that people should not do these things in isolation—that they should not just go ahead and do a heat pump through one supplier and put in some insulation through another; it needs to be done in the round?

Dr Hauxwell-Baldwin: There is the trade-off between carbon reduction, for which the heat pump will be the biggest bang for your buck, and not leading to unintended consequences of unaffordable costs. Speaking particularly in relation to what the earlier panel said, from the foundation's point of view, we would advocate that you make the right choice for your home to have the right outcome. In certain situations, if your interest is motivated by the climate, get a heat pump. Your heat pump will keep you warm.

There is this slight misunderstanding of building physics that a heat pump only works in a well-insulated building. It is basic: if you put the right amount of heat in, it is going to stay there. A heat pump will work, but it will be inefficient, so you maximise the efficiency by making the building as—

Mark Pawsey: By doing the whole thing, okay.

Chair: Having had a heat pump for 10 to 15 years, I am well aware of how they work and I agree with that.

Mr Derek Thomas, the next nine minutes are yours. You may choose to be more efficient, like some heat pumps, and come in earlier, but the



HOUSE OF COMMONS

next nine minutes are yours, sir.

- Q481 **Derek Thomas:** I am a Cornish MP. We have been doing heat pumps for quite a long time, and we are probably doing more now on ground source than we are on air source.

Can I come back to you, Simon, on the 7% return? Is that basically, once everything is said and done, 7% less energy cost? Is that what you mean by the return?

Simon Bones: Well, 7% less cost, yes. We would include in that, for example, if we suggested transitioning to an electric car and the customer was going to do that, which is probably slightly outside this, but, yes, for the most part. That is allowing for the fact that your energy consumption will be a lot lower than that if you move to a heat pump, but we base the cost on energy price caps at the time.

- Q482 **Derek Thomas:** Is that over the lifespan of the appliance? Is that how you work out the 7%?

Simon Bones: No, 7% is simply: "What is the capital cost? What is the annual saving?" Divide one by the other and it is 7%. If you take the view that a heat pump is 15 years, and insulation somewhere between 25 and 50 years—

- Q483 **Derek Thomas:** Yes, I get it. So, in theory, over 15 or 16 years, you get your money back.

Simon Bones: You would probably make two to three times your money back.

- Q484 **Derek Thomas:** Okay. I am a big fan of that kind of heating, so that is good.

Phil, can I ask you about skills? My background is in the building trade. The biggest challenge seems to be getting very busy, competent, trustworthy heating engineers—I tried it and I could not get them to shift from fossil oil in my home—to shift to do something, particularly if we introduce accreditations and a certain standard of delivery. Is the education and training landscape well placed to provide the training needs? Does it help to deliver the accredited skilled force we need? Does that make sense?

Phil Mason: I am not sure if it is only about training needs. I think it is about the wider construction sector understanding the fabulous opportunity that is being created for them through our journey towards net zero and being able to adapt their business and trading models through doing general construction work. I agree they are extremely busy. They have full order books, and if they are my age—which isn't retirement age, but I can see it coming over the horizon—it is about encouraging them to understand not only the fabulous opportunity, but the role that they can play in it by bringing their transferable skills over into retrofit and to participate in the challenge that we have. I do not think, and we do not think as an organisation, that the wider opportunity



HOUSE OF COMMONS

is necessarily understood by the wider construction industry and those that are on their way into it.

Derek Thomas: I think that is true, particularly in the new-build environment.

Phil Mason: I agree.

Q485 **Derek Thomas:** I am 50. I am in the same position, where I am thinking I might retire if I am on a building site in 15-odd years' time, or less if my back doesn't last. What is the incentive for me when, as you said, I am really busy, I am getting paid good money and I am enjoying working with the customers I have had for years? What is the incentive for me to move to do accreditation, to move to a different piece of work? Or do we just give up on that generation and say, "Right, actually, we're only going to win this"—

Phil Mason: I believe we have a lot of transferable skills already in the marketplace, and I am not sure it is about them giving up on the existing business model; it is about taking on additional work and growing their businesses to be able to deliver additional services, because their skills will transfer over in a number of cases. There may be some upskilling and there may be some training related to it, but that could be about business expansion as well, and longevity.

Q486 **Derek Thomas:** My experience, particularly in Cornwall, is there are lots of sole traders and not many companies that employ a decent amount of men or women that might be able to steer their workforce in that direction. I am just wondering about the risk to us achieving the roll-out that we want—and we want to see improvements in people's homes—because of the lack of skills in the workforce and the accreditation bit that may or may not slow down the transferable bit. I am happy for anyone to respond.

Phil Mason: Just briefly, it may not necessarily be about certification and accreditation. We just need competent people to deal with it to be able to deliver within recognised frameworks, and certification or accreditation is a level on top of that that isn't necessarily always attractive to them all.

Derek Thomas: That is helpful. We do need confidence, because you are asking consumers to invest quite a bit of capital into their homes.

Dr Hauxwell-Baldwin: To make the point about the heat pump, again, with a heat pump you have a system designer, you have electricians, and you have gas engineers. Competent person schemes tend to be single function—electrician, plumber—and they certify to building regs. You can install a gas boiler to building regs in the same way that you can install a heat pump to building regs and neither of them may be terribly efficient. That is where a scheme like being MCS accredited gives the consumer the confidence that this person does know what they are doing.

On retraining, I made the point, "What's the incentive for a gasfitter to cross-train?" There is none, because they are super busy. There is no



HOUSE OF COMMONS

incentive whatever, so we need to look at schools. We need to be looking at getting a new generation in, but I will speak to that in a second.

In terms of the barriers to entry, last year nearly 2,000 new contractors joined the MCS scheme. They see it as a route to market and they see it as a growing market. There are 1,500 contractors in the queue to join MCS now, so accreditation is not seen as a barrier. It is seen as a route to market. You access the BUS; you access the social housing decarbonisation fund; you access the SEG. It is not a barrier. Within that 1,500 queue, roughly a third of those are for heat pumps.

While certification is a requirement for access to certain Government schemes, it is also worth noting that MCS introduced a battery standard. There are no Government incentives around installing to standards for batteries, but almost from a standing start there are nearly 1,000 contractors who have registered for battery certification. That is because it is a quality mark. It differentiates you from someone else. It says, "I can install this to a standard." They are incredibly important in engendering confidence and trust.

Q487 Derek Thomas: You may need to come back to us on this, but do you know who the individuals queuing up to get on to your scheme are? Are they companies that are looking to bring their workforce into that, or are they individuals, as we have looked at, who want to do that? It would be helpful to know the appetite among the construction trade, both existing and people coming into it, and where we are seeing the green shoots of people wanting to climb on top of this opportunity.

Dr Hauxwell-Baldwin: I can get you that information.

Derek Thomas: Could you? It would be helpful to break that down.

Dr Hauxwell-Baldwin: Yes, absolutely.

Q488 Derek Thomas: I would imagine bigger construction firms absolutely—

Dr Hauxwell-Baldwin: It is an SME-dominated industry, to be fair. There are certainly some big players, but—

Derek Thomas: There is still a lot of money in an SME company. Simon?

Simon Bones: We do not employ our own people who put in heat pumps, do insulation or whatever, but in our view the skills shortage is overstated. There is a challenge, particularly around things like heat pumps, that there just are not enough installs to attract many people at the moment. When that number changes, people will switch over.

Chair: A lack of pipeline work.

Simon Bones: As Richard said, MCS has 4,000 contractors. They will not all be heat pumps. I do not know what the BUS number was last year, but it was something in the order of 10,000 to 20,000. That is not a lot of installs per person, and you have large companies in that space.



HOUSE OF COMMONS

We support SMEs; most of our providers are SMEs. The issue is that they typically want to be SMEs; they do not want to work for big companies. Big companies talk about skills shortages because—I will not name any names—those people do not want to work for those companies. That is not a problem with skills shortage; it is a problem for those businesses. We think that if we get to 600,000 heat pumps a year, there will be a challenge, but where we are at the moment, I do not see any challenge for the coming two to three years.

Q489 Derek Thomas: I am being a bit parochial, but certainly in Cornwall I know that colleges are struggling to attract apprentices to do plumbing, heating and these kinds of courses. I think that is partly to do with the business of companies trying to get jobs done and out of the way and the time it takes to invest in an apprentice. You are saying that across the mix everything is going in the right direction, but we could probably do better. Is that what you are saying?

Simon Bones: I think so. We formally have our MCS survey tomorrow, so we are technically in that queue. I will not comment on how painful that process has been. We also support TrustMark. We encourage all our providers to be TrustMark. I will say that by far the best of our insulation partners is not TrustMark registered. The fact that they are not TrustMark registered does not make them bad; they just have not seen the value of that. However, because we want to transact predominantly with mortgage companies and mortgage companies want TrustMark, we have told them, “You’ve got to go and get the certification,” and we are very supportive of that.

I think that accreditation is necessary but it is not sufficient. What you want is people who are putting the right products in. You mentioned batteries. I could legitimately sell you a battery that you absolutely do not need, and no one could prove that I was doing anything improper. I would tick every box and you would still be wasting £3,500 to £5,000.

Derek Thomas: I hear that. Phil, did you want to come in on that?

Phil Mason: I was going to say: let us talk to your contractor!

We are talking a lot about heat pumps as a very good technology. Do we need to become more technology agnostic? There are a lot of technologies out there—panel heaters, infrared heating, all sorts of things—that we seem to not include in the conversation as much that also have their part to play, as long as they are installed properly by competent people under recognised processes and schemes.

Q490 Mark Garnier: Following on from the point about the people you get to do the work, and carrying on from my rant earlier about dodgy builders, how do you find decent ones? How often have you been let down by a subcontractor not meeting your standard?

Simon Bones: Very hard and almost all the time. It is very different by sector. If you want heat pumps and solar, because of the excellent work of Richard and his colleagues, those people are pretty good for the most



HOUSE OF COMMONS

part. If you look at insulation, which is a market that, since CERT and CESP died 20 years ago, has become a social housing market, they are terrible, almost without exception. I will not say without exception, but there is very poor customer service, very little quality, a fixation on price—if they can save a pound per square metre by using a less good product, they will do it. In my view, that is because that market has been driven by local authorities procuring the cheapest that they can get and energy companies through ECO procuring the cheapest that they can get. Finding good people there who can provide cavity wall insulation for a home, like I imagine people here have, is really difficult.

Our value-add, effectively, is that we have done that work. If you as a customer try to insulate your home, you will not be able to find a name that you recognise that will provide a high-quality service without taking a lot of time and effort doing it.

Q491 Mark Garnier: Phil, you run TrustMark and you are the guy who is there to try to give reassurance to consumers of a wide range of building services, yet builders do not need to join your organisation. It is a voluntary thing that they can do. What you do is incredibly helpful—it is really useful—but the average consumer has no idea how this market works. It is ferociously complicated. I am slightly straying beyond the brief, but it is very difficult for people to understand.

Phil Mason: I work for TrustMark rather than run TrustMark, just for the record. TrustMark membership is very successful in the areas that it is mandated through the funded schemes. We are a self-funding not-for-profit. If there were funding available to place us as the Government scheme into the forefront of consumer recognition, possibly through all sorts of promotional campaigns through the media, it could change that landscape enormously. We have not cooked up the standards for ourselves. It is not something we have just designed in a dark room. TrustMark was created through consumer protection organisations and through industry. It is not just a unilateral decision. I believe that if that were more widely promoted, the quality and the delivery would speak for itself.

Q492 Mark Garnier: I think that it certainly helps. One of the slight problems with all this, though, is that you could have somebody who fails your standards and you could remove that TrustMark accreditation, but that person could carry on building—

Phil Mason: In the wider world.

Mark Garnier: In the wider world, absolutely right. It comes back to this protection of the consumer. Having started this campaign on a licencing regime for contractors, I have been inundated by people, including from trading standards. This is not a criticism of TrustMark, by the way. You are nearly there as a solution, and the answer could be compulsory membership of TrustMark—that you cannot work without membership of TrustMark, as an example. But it is shocking that the only protection a consumer ultimately has is the court. To prosecute a case, it costs £150,000. If you win and you win costs, the builder goes bust on you, so



HOUSE OF COMMONS

you are down £150,000 and the cost of replacing the work. The builder walks away for nothing.

Phil Mason: One of the intents behind TrustMark was originally, as a result of the Each Home Counts review, that it would become the single quality mark for retrofit in the same way that there is a gas registration scheme for gas and you are either part of it or not. If you are not part of it, you cannot continue to practise; if you are part of it, the protections that TrustMark provides and will continue to provide through the continuous improvement process that we operate will help protect against those situations as we go forward.

Q493 **Mark Garnier:** Fantastic. I want to go to the wider publicly available specifications—PAS 2035, PAS 2030 and all of these things. Do we run the risk of setting the standards too high and making it increasingly difficult to deliver to them?

Phil Mason: PAS 2035 is a process that has been designed and consulted upon by industry. It is, fairly indisputably, a good process for assessing a building, getting a design, getting it managed, and evaluating options that are suitable for that house, whether it is a heat pump or a different technology. I think the challenge is not so much that it is over-designed or engineered; it is the engagement and the understanding from the wider sector. We know the process works, but we need to bring people that work specifically and solely under building regulations into a process that considers whole-house retrofit and mitigates risk. There needs to be a movement from those who are delivering quality work of measures in isolation into a whole-house approach within a recognised process. I would not say that it is over-engineered. I think that the understanding and the engagement around it need to be improved.

Q494 **Mark Garnier:** So that is where the problem is. Do we run the risk of pushing people out of the market? Richard, you wanted to come in.

Dr Hauxwell-Baldwin: In much the same way as TrustMark, MCS is run for the public benefit. It is there as a standards organisation to enforce the standards. One of the recurring themes here is about how we create trust and confidence. You do that by raising standards, not lowering them. Part of the scheme redesign within MCS is fundamentally about the consumer. How do you instil confidence and trust in the process that they have gone through? At the forefront of that, there will be a customer duty that the installer will have to present to the client, saying, "This is how I'm going to sell to you. This is what I'm going to sell to you. This is what I'm going to deliver. This is what you can expect from it. This is what happens if things go wrong," so it is completely transparent from the outset.

Q495 **Mark Garnier:** Assuming that the guy or woman doing this understands what is going on and is not chased away by the fact that there is what appears to be ever-increasing regulations.

Dr Hauxwell-Baldwin: In actual fact, it is a simplification. The old system was based on desk-based compliance, and this is switching to



HOUSE OF COMMONS

field-based compliance. If they can deliver quality, MCS will be happy. Importantly in this sense about engendering trust, as part of the contract with Ofgem around the boiler upgrade scheme, every single recipient of a heat pump under the boiler upgrade scheme has had a phone call from the MCS BUS team to ask them, "How did it go? What was the process like?" That will happen with every MCS installation under the new scheme. That is a fundamental. If you want to place consumers at the heart of this process, you engage with them as well: "How was that for you?"

Simon Bones: The concept of mandatory certification and minimum standards is one that is hard to disagree with, and I do not. As I said, we support both of the organisations to my left. I think that there is a danger that because of the bad experience that certain people have had, we create a process that is very difficult for anyone to make money out of. If you expect people to do a lot of work, for example, on quotations and provide lots of advice, and then you say, "By the way, the customer goes to three different people and you will only get a third of that," that builds in a lot of extra cost for the customer.

If you look at the PAS 2035 process, that although there is no mandated separation of those roles, there are—six or seven different roles in that process? I am asking the question; I am not sure. We disagree that that is the right way to do things at scale and we are not trying to do that. In my view, a lot of that is designed to protect low-income vulnerable people. If you want to make a grown-up decision about buying something for yourself, I think you should be allowed to buy that product from somebody who has appropriate guarantees, certification and accreditation, but does not necessarily need to create a lot of bureaucracy.

If we are trying to do 23.7 million homes in England and Wales, even if we do not think that all of those need work, given the number of people you would need to hire, the amount of manpower required to advise people and so on—which is part of why we think it needs to be largely digital—it simply cannot happen. There are not enough people to do it. I have never met a single person who I think properly understands retrofit. I would probably include myself in that. Not a single person who understands how those numbers work. I do know how an EPC works and I have met half a dozen people who do, but I also—

Chair: Out of 62 million or whatever the population is?

Simon Bones: I haven't spoken to everyone in the UK. But I think that it is very hard if you make that up to an individual adviser and you need thousands and thousands of advisers. I think it will be very difficult. We have taken a different approach. I believe that accreditation is the minimum; as I said, I think it is necessary but not sufficient. If you want to buy a laptop or a mobile phone, you do not worry about the accreditation. You expect that is in place. You buy the phone or the laptop that you want based on what is important to you.



Phil Mason: I would agree with digitisation to bring it to scale.

Q496 **Chair:** Looking at standards and levels of oversight in other countries—I think Richard Hauxwell-Baldwin might be the best for this one—how does the UK compare to neighbouring countries in the home heating sector?

Dr Hauxwell-Baldwin: Looking at our EU neighbours primarily, accessing Government grants and funding all needs to be through certification bodies that have quality marks associated with them. In France, for example—again, I will not attempt the French—there is a similar scheme to MCS. In order to access any of the French Government grants, you need to be an accredited installer. As part of that, you need to have met minimum technical competencies. You are assessed and there is a quality charter that all heat pump contractors must meet in order to register and be eligible to receive any funding or to quote for any of the programmes under the France retrofit scheme.

Q497 **Chair:** We hear heat pumps are popular in Scandinavia and the Nordic countries. Are they popular in France as well?

Dr Hauxwell-Baldwin: France installed over 600,000 last year. It is the largest heat pump market in Europe. They went from 100,000 in 2010 to just over 600,000 in 2022. That is no fluke. There was a lot of Government support for that across a whole range of holistic policy measures: low-interest loans, tax credits, straightforward grant schemes. Dare I say it, in 2017, energy efficiency was a central plank of Emmanuel Macron's election campaign. The French Government take it very seriously.

Chair: The BBC never reports these interesting and important things, and rather prefers the soap opera of politics.

Dr Hauxwell-Baldwin: Heat pumps should be leading the 10 o'clock news every night, but they are not.

Back to your question, in Germany you have to be registered. In virtually every EU scheme under the REPowerEU regulations, in order to access financing there is a certification process to ensure that it is a regulated market and that there are competent people doing it. Effectively, in much the same way as the UK is doing with access to grant funding, the EU in particular has similar but slightly different rules in each country.

Q498 **Chair:** Given what you said about France, we can probably see a more macro picture as a result of the larger number of installations. Have they seen their aggregate demand for energy go down? We know about the efficiency of heat pumps: once you get a kilowatt in, they will give you two to three kilowatts of heat out.

Dr Hauxwell-Baldwin: That is a very good question and I do not know the answer to that. I can try to find out for you.

Chair: If you could, we would be very grateful.



HOUSE OF COMMONS

Dr Hauxwell-Baldwin: France is a really interesting example. We produced a report doing a comparative policy analysis of the UK and France last year. There is a whole range of different reasons why France has managed to do that, not least the central Government support, but France simply has more electricity. There are more homes connected to the electricity grid than there are in the UK. That is where I think we get stuck with this whole debate: "Well we've got the gas grid. We need to repurpose and reuse it." The fact that gas is so embedded in our daily lives here is part of what is holding us back.

That goes back to my earlier point about certainty. The National Infrastructure Commission came out and said, "Look at decommissioning the grid." All the noises coming out of Government are that electrification is the way forward. To create that certainty and trust that we have been talking about, bring some of those decisions forward and recognise that transmitting gas through pipes is last century's technology. We need to move beyond that. If electrification is the route to decarbonisation, we need to do everything we can to support that.

Q499 **Chair:** Being one of Harry Truman's annoying two-handed economists, on the other hand—I am aware that the gas and electricity lobbies in the UK have a bit of a battle with each other—the gas lot will say, "Oh, well, you couldn't deal with that beast from the east even though we had a number of years ago if we electrified everything." How would you respond to that?

Dr Hauxwell-Baldwin: We have a range of other storage solutions that we can look at. Hydrogen has a role in our energy future; it is just not in our homes heating them. There is the option of storage using green hydrogen, which is part of ESNZ planning. You can use hydrogen for storage. There is the recent call for evidence around battery storage and the UK's long-term battery plans. You can have industrial-scale batteries. There are options and there is lots of research that says it is eminently possible.

Q500 **Chair:** In the minute and a half we have left, Simon and Phil, what are your reflections on the UK versus other countries? Do you have any knowledge or experience?

Simon Bones: I have very little knowledge of other countries, so I will not talk about that. One thing that I believe is true is that not every country has the spark spread that we have with electricity and gas pricing. Your number on heat pumps shows that you bought your heat pump a while ago, because two to three times is not great performance these days.

Chair: That is good to hear for when I upgrade.

Simon Bones: If it is more than eight years old, we reckon we can get you a payback on it.

Chair: I might speak to you later, Simon.



HOUSE OF COMMONS

Simon Bones: If it is less than eight years, it is not worth doing. Fundamentally, even if you are looking at three or four times, if you have a 90% efficient gas boiler or oil—and oil is not materially more expensive than gas most of the time—then you have a four times price advantage. That is challenging because we still have a lot of people on gas, and with fuel poverty it is important that the prices do not get jacked up. If you want to encourage electrification, you boost what you get for selling your solar energy back, because that is not a logical process—you make the stuff and sell it back for half of what you buy it for—and you need to change the situation with taxes on electricity.

Chair: Thank you. Final word to you, Phil.

Phil Mason: I am not an expert on some of the other countries' schemes, but if there are elements of those schemes that are particularly successful, we need to learn from them. We need to calibrate them to our climate that we have here, should it be variable, and it will be. But I am also mindful that we do not throw out the baby with the bathwater with the progression that we have made with certification, registration schemes, consumer protection and the technical standards that have been created. I do not think it is a point to start again. I think it is probably a point to move on from with additional learning.

Chair: That sounds like a plea for the Committee to go to Bordeaux for a week for a fact-finding mission. Thank you all very much for your time this morning. We have to end there; Prime Minister's questions are coming up and everybody gets very itchy at this time on a Wednesday. Thank you.