

Business, Energy and Industrial Strategy Committee

Oral evidence: Energy Efficiency, HC 1730

Tuesday 12 March 2019

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Members present: Rachel Reeves (Chair); Vernon Coaker; Mr Tanmanjeet Singh Dhesi; Drew Hendry; Stephen Kerr; Peter Kyle; Mr Ian Liddell-Grainger; Sir Patrick McLoughlin; Albert Owen; Mark Pawsey; Antoinette Sandbach.

Questions 88 - 278

Witnesses

I: Ed Matthew, Associate Director, E3G; Teresa Bray, Chief Executive, Changeworks; Michael Lewis, Chief Executive Officer, E.ON UK.

II: David Adams, Technical Director, Melius Homes; Peter Jordan, Group Planning Director, Persimmon; David Thomas, Chief Executive Officer, Barratt Homes.

Examination of witnesses

Witnesses: Ed Matthew, Teresa Bray and Michael Lewis.

Chair: Thank you very much to the three of you for coming to give evidence to us today on energy efficiency. This is the second evidence session in this inquiry. We appreciate your time this morning. We have two panels this morning: this first one particularly on issues around able-to-pay customers and how we ensure that they take energy efficiency measures, and the second panel is with home-builders. We are going to try to spend about 45 minutes per session. We will try to be disciplined in asking short questions, and you can return with short answers. You do not need to repeat each other's answers. If you agree with the other people, you do not need to tell us that. We very much look forward to your evidence. We will start this morning with Albert Owen.

Q88 Albert Owen: Very briefly, what factors are inhibiting customers' demand for energy efficiency in the able-to-pay market?

Teresa Bray: I am Teresa Bray from Changeworks. We operate in Scotland. Rather than calling it the able-to-pay market, we call it self-



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funded, because a lot of people think that they are not able-to-pay. A lot of it is about lack of trust. We looked at past schemes and we all suffer from the cold calling you get from insulation companies, or some of the rogue ones, rather than main ones. There is a past history of grant funding as well. Lots of people expected to get grants and they expect more grants will come along so committing their own resource is an issue.

It is a very complex issue. You are working in people's homes. They want to be confident that they are going to get good tradespeople in, that there is going to be consistency and the changes are going to go through. A further issue is it is focusing on cash savings. For some families, £200 makes a lot of difference. For a lot of people, though, it just is a couple of cups of coffee a week. It is not sufficient. You cannot just focus on cash savings. You have to look at the wider drivers. You have to look at the appropriateness of the supply chain as well. Few of us would probably want companies like Carillion coming into our homes to do work, but you want to have those trusted traders.

Q89 Albert Owen: Is this catalogue you are giving us stopping people from doing this? Is that what you are saying?

Teresa Bray: Yes.

Q90 Albert Owen: Mr Lewis, do you want to add anything to that?

Michael Lewis: I agree with all of that. The fundamental issue of trust is important. Also, access to finance is one of the key inhibitors. Fundamentally, the Government need to have some strong incentives in place, whether that is regulatory requirements through building regulations, for example.

You need to look at different sectors in a different way. For owner-occupiers, things like variable stamp duty or council tax incentives will additionally add to the financial benefits and then you need to show a pathway to how we reach the targets. The target is right but we currently do not have the policy instruments to get us there. That is the key point. You need a policy instrument for each sector as appropriate. We have ECO for the vulnerable, which needs enhancing. We do not have anything in the owner-occupier space. I have already mentioned some things. For new build, we need stronger building regulations and for the private rented sector, we need stronger requirements before houses can be rented out. With that suite of policies, plus the access to finance through a green mortgage scheme, we can stimulate the market. That is why we are pioneering a green mortgage at E.ON.

Q91 Albert Owen: Mr Matthew, can I ask you about what Mr Lewis touched on, in terms of the targets? Are the targets in the Clean Growth Strategy realistic, in that all homes would reach the EPC 2035 target?

Ed Matthew: They are realistic and they are necessary. What you need to remember is that the number of installation measures going into



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people's homes has crashed by 95% since 2012. At the peak of the market in 2012, 1.7 million measures were being put into people's homes. We need to get back up to that level of installations. We have done it before so there is every reason to believe that we can do it again.

Teresa Bray: In Scotland, 42% of our housing stock is already at EPC C, whereas in England it is only 30%. We have had ongoing programmes. It can be done. It will be taxing but it has to be done and can be done.

Q92 **Albert Owen:** Can I ask, briefly, what has been the impact of the withdrawal of the Green Deal on the Government's delivery of energy efficiency improvements on the able-to-pay households? What has been the effect? You talked, Mr Lewis, about the need for regulation. Was there a need for grants or part-grants, as Ms Bray said?

Michael Lewis: Yes, in the appropriate places—for example, ECO. The withdrawal of the Green Deal had very little effect, because it was very ineffective to start with. That was the basic problem with it. It was complicated, it was expensive for consumers and it was not consumer-focused.

Q93 **Albert Owen:** I get that, but things were okay before that.

Michael Lewis: No, they were not, but at least ECO was better funded and had a much bigger impact. The funding for ECO is rightly focusing on vulnerable customers, but the funding has reduced and that means the number of measures has reduced. Partly, we have also taken the low-hanging fruit and there are more difficult measures to do now. If we are focusing specifically on able-to-pay, we need that strong, stable framework with incentives for households but they also need to see the value of it, not just in cash terms immediately in their energy bills, but in enhancement in the value of their house. That is why the work we are doing on the green mortgage is to try to bring that level of education into the banking system, so that people see the value of it and it becomes something that people discuss when houses change hands and when they are bought and sold. At the moment, it is relatively low down the list of priorities. We need to enhance that.

That is why it needs to be a national infrastructure priority, that is why we need TrustMark to validate work and that is why we need things like a better level of understanding of the value of energy-enhancing measures through, for example, a green building passport, where people can see what has been done and value it transparently. All of those measures go into making this something that people talk about when houses change hands. It is low down the list at the moment. They can see enhanced value from it.

Q94 **Albert Owen:** In Scotland, you have the national infrastructure and all those mechanisms in place. What about the Green Deal itself? Did that have any impact, and what was the reason for withdrawing it? Do you think it was just because of the high interest rates that people did not



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take it up?

Teresa Bray: It was not just the high interest rate. The complexity associated with the Green Deal was difficult, in terms of attaching it to your energy bills rather than straightforwardly taking out a loan. The traders that were able to deliver the Green Deal were quite limited as well. Often the traders would be working in your homes. It was not piloted to the extent it should have been. With something as complex as this, you need to learn your lessons and adapt as you go along, rather than thinking that one single solution will solve everything.

Ed Matthew: It was not tested at all, to my knowledge. This major new energy efficiency policy was not tested. If they had done that, they would have realised that the way it was set up and the high interest rates were going to be a complete failure. That is a lesson we need to learn. The biggest impact of the Green Deal is that it has killed Government interest in doing another loan scheme, which is a crying shame because if it is done properly, it can work.

Q95 **Antoinette Sandbach:** Mr Lewis, you have already said that energy efficiency should be a national infrastructure project. I would like to declare that I made a submission to the National Infrastructure Commission that it be a national infrastructure project. I put that on the record. Mr Matthew, what is your view about whether self-funders should be part of the national infrastructure project to improve energy efficiency?

Ed Matthew: You need to see energy efficiency as a complete programme, rather than taking out one piece. Energy efficiency fits as an infrastructure priority for the Treasury under the criteria that they define. The National Infrastructure Commission and the Committee on Climate Change have called for it to be an infrastructure priority. The problem with energy efficiency policy in the past is that it has been picked out basically as a social policy to help people a little bit here and there perhaps with fuel poverty or to bring down their bills. In fact, energy efficiency is critical to the development of our energy infrastructure.

Q96 **Antoinette Sandbach:** I think your evidence was that £1.7 billion of Government investment would unlock a substantial amount of private investment in energy efficiency measures.

Ed Matthew: That is correct. It is £1.7 billion in total. We have approximately £0.7 billion invested at the moment. If you raise it to £1.7 billion, you could leverage in £3.5 billion of private funding. The mechanisms that you do for the able-to-pay market would be the ones where you leverage the most funding in from homeowners.

Q97 **Antoinette Sandbach:** Ms Bray, you have spoken about the differences in numbers in Scotland. Of course there is a national infrastructure project in Scotland. What has been the difference between on the self-funding or able-to-pay market?



Teresa Bray: Though the Scottish Government does provide funding as well, a lot of the external wall installation programmes lever in ECO. Scottish Government funding is provided. They are also making contributions of between £500 and £2,000 per household. In that element, yes, there is some grant funding, but it is not fully funded there. Also, we have now moved into working pilots. We are running a pilot in Peebles to start off with, which is a market town in the borders, which is very specifically at the self-funded and able-to-pay market, recognising what barriers they had before they do it. You need that engagement and revenue funding to do the engagement to build the trusted traders they will work with.

Q98 **Antoinette Sandbach:** Can I ask whether this also tackles the issue of hard-to-treat homes, which are the oldest homes, perhaps with solid walls? That is where you need internal or external insulation, which is very expensive. Has the infrastructure priority led to changes in those hard-to-treat homes?

Teresa Bray: You are looking at specific ones there. Most householders will not necessarily want to complete their whole house at a time. If they are getting the kitchen done, they will be looking at internal wall insulation done at the same time. They may be looking at their rooms in roof, which is a very typical Scottish building type, where they are getting insulation done in the coombed ceilings. They will look at areas there that are different technologies. "Hard to treat" should not be the term. They are more complex, but they can be done. There are solutions. It depends. Some old sandstone properties are more efficient. The concrete ones are the more difficult ones at the moment. They are getting external wall insulation. A few households are paying themselves but it is a long process.

Ed Matthew: In Scotland, four times as much is invested per capita in energy efficiency as it is in England. That is no coincidence. One of the reasons for that is that it has been made an economic infrastructure priority. Down in Westminster here, we allocate £6 billion a year to infrastructure programmes publicly but not one penny of that goes to making our buildings more energy-efficient, despite the fact that would be a much more popular programme than putting the money into, for instance, high-speed rail or indeed into new roads.

Antoinette Sandbach: My constituents would probably agree with you.

Q99 **Stephen Kerr:** What financial incentives would you like to see the Government put in place to support the self-funding market?

Michael Lewis: There are three things. The first is variable stamp duty depending on the EPC standard.

Q100 **Stephen Kerr:** Why has that never been tried before? It seems such an obvious thing to do.



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Michael Lewis: That is a good question. I suspect because it was felt to be a cost to the Treasury but if it is done in the right way it need not be, because you make it revenue-neutral. That would be one thing. The second thing would be low or zero VAT on energy-efficient products and services, so that you really start to stimulate the market, drive growth in those areas and, indeed, drive innovation.

The third thing might be local authority revolving loans for the lower end of the market, where stamp duty will not necessarily have an effect for lower-value houses. Those are three things.

You might even look at home improvement ISAs where you can save money and the Government add additional funding for approved energy efficiency work. There are a number of things that can be done. The other thing is to give support to the initiative around energy-efficient mortgages, which we are currently piloting with various European banks. If you really want to unlock finance at a large scale, you have to get the private banks to back this, which is what we are trying to do. That will work by doing an energy survey when a house is up for the sale. The bank will then be told, "These are the things you need to do to raise the EPC standard, this is the cost, and through the energy savings you make, the bank is prepared to fund those measures". We also know there is a lower risk of default for houses that are better insulated so it reduces the cost of the loan overall. There are a number of things.

Q101 **Stephen Kerr:** Has that been tried anywhere?

Michael Lewis: We are currently piloting it right now. We just started it with BNP Paribas.

Q102 **Stephen Kerr:** Do you have anything to add?

Ed Matthew: If you look at international best practice, tax incentives and zero or low-interest loans have shown to be effective. On stamp duty, the Treasury has not done this because it is a very simple tax and they do not want to make it more complex. It is extremely popular with experts and it should be tried. There has just been resistance from Treasury to change it.

Q103 **Stephen Kerr:** Where does the low-interest loan model work?

Ed Matthew: In Germany it has probably been most successful.

Q104 **Stephen Kerr:** They have the advantage of an investment bank, do they not?

Ed Matthew: They do. We did have one but the Government decided, in their wisdom, to sell it off. Nevertheless, there are other models you could potentially use to get a loan scheme like that off the ground. There are 0% loans in Scotland, which I am sure Teresa will talk about in a second. In Germany, they are doing 250,000 loans a year. Those are 0% loans. To go with the loans, they also have a grant scheme, so they provide subsidies to the measures in addition, depending on how energy-



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efficient you make your home. The more energy-efficient, the more subsidies you get. It is very successful. It is good for the German economy as well. They spend €1.7 billion on the scheme every year.

Q105 **Stephen Kerr:** It's the magic number, 1.7, isn't it?

Ed Matthew: It is. It is uncanny. They get back €1.6 billion in VAT receipts alone related to the scheme, plus it has economic growth impacts. It almost pays for itself. There has been a psychological block in the Treasury, saying, "We are simply not going to subsidise loans for energy efficiency because it costs money." In Germany, it is seen as a good economic thing to do.

Michael Lewis: I lived in Germany for many years and had a KfW loan to upgrade my house's energy efficiency. You get introduced through your own bank. It is not something you do independently. The bank introduces you and you can raise up the standard by taking not a zero but a very, very low-cost loan. It is made very attractive because it is marketed through your bank—that is, people you trust, which is why we are trying to do this EeMAP scheme through the bank, through somebody you trust.

Q106 **Stephen Kerr:** You acknowledge that the key element in all of that is the strength of the KfW. That is a very powerful thing across the board in terms of patient capital and long-term investment in general.

Michael Lewis: Indeed. It is very effective.

Q107 **Stephen Kerr:** Let us talk about Scotland, because we like to talk about Scotland—Drew and I do, anyway. How is it going in Scotland in terms of the low-interest loans, and why is it working?

Teresa Bray: There has been considerable take-up; £28 million has been the pot, which has supported over 7,000 homes. There has been associated cashback, which can be that driver, where people are thinking they are getting better value for money. It is often not just the interest rate but cashback in any of these things, whether it is buying you mobile phone or whatever; it is seen as one of the tools there. It is part of a more complex support structure as well, where they know that the works they are doing are works that are going to make a difference and there is that long-term commitment happening.

It is not a perfect loan system. We do not do everything perfectly in Scotland. You have to think about the structure of the loans, particularly when you are working on lower-income households. Some of the credit checks do not take into account the flexibility of income and issues where you have to have paid for your contractor before you get your loan. It is not perfect. That prevents some people from taking out the loans and carrying out the work. You have to design your loan system around the people who are going to be benefited for. That makes me think that the mortgages will meet very well a certain sector of the population but not all the population.



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Q108 Stephen Kerr: Can I ask a very quick final question before we move on? Of all the things that have been mentioned, and a variety of different things have been mentioned, which are best in terms of delivering value for money for the Government and which are best for delivering value for money for the consumer?

Ed Matthew: The two things that I would highlight are, first, that we are backed by the Green Finance Taskforce, with stamp duty rebates, which are revenue-neutral. The second point is about 0% loans. Just because there is an outlay of capital required for it does not mean it is not good value for the Government. It is. It more than pays for itself.

Teresa Bray: I would say VAT—paying VAT at 20% on energy efficiency.

Q109 Stephen Kerr: It is good value for both the Government and the consumer.

Teresa Bray: It is not good value for householders. You are increasing the cost for the household of the works by adding VAT.

Michael Lewis: I agree with Ed. At a macro level, investment in energy efficiency is probably the single best investment the Government can make. It will always be valuable for the Government. The key is making it attractive for consumers so they are incentivised to do the work. That is where policy should be focused, on consumer attitudes and trying to boost demand. It is honestly a no-brainer to invest in energy, for so many reasons.

Q110 Mr Dhesi: Mr Lewis, you touched upon the role of regulation earlier in terms of stimulating the market. To elaborate further and for the record, should the Government be using regulation to force change within the able-to-pay market? If so, what form should this regulation take?

Michael Lewis: It needs to be different for the different properties we are targeting. If you look at new builds, for example, we absolutely have a target for getting to zero carbon. We need to put the policies in place. That should be ever-tightening building standards to deliver that. It does not need to be very specific in deciding exactly which things need to be done. That can be left flexible for the developer to decide. The standard they have to get to has to be set in stone and we have to have milestones along the way to make sure we are tracking it.

The reason it needs to be very hard is it is a bit like the renewable energy target: people were confident to invest because they knew it was a long-term strategic commitment from the Government. We committed large amounts of capital to that. If the policy target keeps changing, the value chain does not develop and people do not investment in the skills, the workforce or the technology. That is why the long-term perspective and the long-term target is so important, as are ever-tightening building regulations to get there, with flexibility for developers to decide exactly how they deliver the outcome, so you can innovate around those targets. That is what we need to see.



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For the private rented sector, we also need tighter standards, but for the owner-occupier market we need financial incentives. We discussed stamp duty and so on and so forth. For social housing and vulnerable customers, ECO is a great mechanism but it needs to be enhanced and beefed up to deliver back to the levels we were getting a few years ago.

- Q111 **Mr Dhesi:** Ms Bray, given that Mr Kerr said we would like to talk about Scotland, in May 2018 the Scottish Government published the “Energy Efficient Scotland: route map”, within which they outline a clear long-term proposal and regulatory timetable of voluntary and mandatory minimum regulatory standards for different tenures. Do you think they have gone far enough, or do we need to do more?

Teresa Bray: I do not think they have gone far enough for the speed at which we have to move for climate change. Putting down the long-term targets and saying there is going to be regulation coming down the road, whether it is in 2030, means that it will drive the private sector and homeowner-occupiers to work. If you do not have any regulatory backstop coming in at the end, you are not going to be achieving things.

It also has cross-party support. Getting proper cross-party support for the whole concept of energy efficiency is vital, because it is over such a long period of time. It is much longer-term than any parliamentary term.

- Q112 **Mr Dhesi:** Mr Matthew, what is your opinion in terms of regulation and what form that should take?

Ed Matthew: You need to remember that homes rated F and G on the EPC rating are technically unfit for human habitation, because they are dangerously cold. If you look at the private rented sector regulation, it is trying to eliminate those homes, quite rightly. It is only taking homes up to EPC band E, which is the average EPC rating for a home in fuel poverty. It is not just about the need for regulation, which there clearly is, but about getting it right. We certainly need a clear timeline for regulation to take homes up to EPC band C as fast as we possibly can. That is critical for driving demand.

- Q113 **Mr Dhesi:** In their report, “Warmer & Greener”, the Westminster Sustainable Business Forum suggested that regulation could mandate minimum standards at the point of sale. In your opinion, should households have to make upgrades at the point of sale?

Ed Matthew: This seems quite harsh, but it is surprisingly popular when you talk to people. If you ask people to go up to a very high standard of energy efficiency before they can sell their home, they might be upset. Eliminating the F and G, to start with at least, would be a good thing to do. If you introduce it slowly and give people a long time to be able to get their homes ready, you could say, “To meet EPC band D, you have five years to get there.” People would appreciate and understand that. That would certainly drive demand in the market. It would also be economically efficient for the Government, because they would have to spend less incentivising people to do the work.



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Q114 **Mr Dhesi:** Ms Bray, what do you think in terms of making it mandatory to make upgrades at the point of sale or perhaps doing renovations?

Teresa Bray: There is the point of sale, or the possibility of being able to pass on to the next purchaser the requirement to complete the work within a set period of time, taking into account the difficulties about selling properties sometimes. Definitely when you are having any renovations, and any building controls or works, you should be looking to upgrade the properties then as well.

Q115 **Mr Dhesi:** Mr Lewis, what is your opinion on that? Also, Calor Gas said that regulations could disproportionately disadvantage rural homeowners. What is your opinion on that as well as on mandating?

Michael Lewis: Mandating standards, as I have said, is definitely right for new builds and definitely right for the private rented sector, where a lot of these lower-quality houses are. That is absolutely critical. For existing houses in the private owner-occupier sector, the fiscal incentives, as we have already talked about with the variable stamp duty and so on, are probably a better mechanism for doing it, but I would not rule it out. I do not understand why Calor would say that it disproportionately disadvantages rural. I do not understand the logic of that, to be perfectly honest.

Q116 **Mr Dhesi:** What they have said is that EPCs are on average lower and therefore that would have an impact if you mandate it at the point of sale. Given that 89% of all gas—

Michael Lewis: Yes, I see what you mean. It means we have further to go in rural areas. The benefits are the same and it still makes sense. The challenge is that there is no doubt that there is always a big benefit from this investment, but the question is how you make it happen in the best way. As far as possible, creating a market for the private owner-occupier in green mortgages with the right incentives is the best way to do that, with full transparency of the value. For other sectors, it requires more targeted regulation to enforce standards, as I have said.

Q117 **Vernon Coaker:** Energy efficiency is crucial here. According to the evidence we have had, there is a large amount of greenhouse carbon emissions from houses. The targets are set, but we are not going to meet them unless we do something. One of the big ways of doing that would be if the financial institutions upped their game a little bit. What products are being offered? What should they do? Are they interested in investing in residential properties rather than commercial? Most of the investment they boast about is in commercial or big projects, rather than residential, isn't it? What is going to happen? What is your view of all that? Are some banks better than others? Do you have a league table of banks?

Michael Lewis: I have already mentioned this energy-efficient mortgages action plan. We are the only energy supplier that is part of that. It is a consortium of financial institutions and banks across Europe, which we are piloting with BNP Paribas. They very much understand there



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is huge value in this investment. They very much understand that it is in their interest to reduce the risk of loans and they know that investing in energy efficiency is one way of doing that. For whatever reason, it has not been a priority in the past. We are definitely trying to drive that. I suspect that if we get this right, you will start to see this product much more widely available across the market.

Q118 **Vernon Coaker:** I accept that E.ON is driving that. I get that you are trying to drive this on, but for the banks it does not have that momentum and drive that you would hope.

Michael Lewis: It does not yet, but this initiative is trying to do exactly that. It is trying to get the banks to understand the value of it. Some of the banks really are trying to push this hard.

Q119 **Vernon Coaker:** Which banks have bought into this? Do we have a list? Are they all bought in?

Michael Lewis: Not all of them, no, but there is a large number.

Q120 **Vernon Coaker:** Which are on the list?

Michael Lewis: I do not know off the top of my head, to be honest. I can supply that afterwards.

Q121 **Vernon Coaker:** Are HSBC on the list?

Michael Lewis: I do not know.

Q122 **Vernon Coaker:** Are Barclays?

Michael Lewis: I think Barclays are, yes.

Q123 **Vernon Coaker:** HSBC?

Michael Lewis: I can provide a list afterwards.

Q124 **Vernon Coaker:** The banks are a big deal, are they not? They are going to be lending money. If they are not up to doing it, if it is not a financial product that is available, there is a problem.

Ed Matthew: Green mortgages have a role to play. If they are going to work, there are several things that need to happen. The first thing is that the financial institutions will need to be regulated to give them a target on energy efficiency within the houses that they hold.

The second thing is that they have made it very clear in discussions we have had with them that they will not invest in these sorts of products unless there is demand. To generate demand, they want things like stamp duty rebates and they want 0% loans. They laid that out in the Green Finance Taskforce recommendations last year.

Q125 **Vernon Coaker:** It is really interesting what you said about the need to regulate. The Government should regulate the financial institutions to deliver the products that they are currently not doing.



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Ed Matthew: You have to do that if you want to get them to take this seriously. In the Netherlands, there are rules in place that say the banks have to offer a higher mortgage to people making their homes energy-efficient. That has helped to focus the minds of the banks to help on this. To be clear, I have seen this happen time and again over the last 10 years, where the Government gets focused on a tick-box energy efficiency solution. The one they are focused on now is on green mortgages. If they do this, they may well do this at the expense of doing all the other things that you need in terms of regulation and financial incentives.

Q126 **Vernon Coaker:** Be really specific. There are green mortgages; what are the other two or three things the Government should regulate the financial institutions to do, which would encourage investment in this?

Ed Matthew: They could regulate them to say that you have to provide a certain level more of mortgage to households if you are making it energy-efficient, and perhaps even more if you are making it highly energy-efficient.

There are other ways you could regulate them. You could say that they have to bring up the level of the EPCs within their housing stock. You could regulate to say, "You cannot provide mortgages for, say, F and G properties." There are different regulations you could introduce that would help to focus their minds and drive their interests.

Michael Lewis: There are two ends of this. One end is the consumer and actual lending end. The energy-efficient mortgage product will only work with a framework of targets and the policies to get us there—that is, you need to stimulate demand and then the supply will follow. We are putting the supply in place. The other side is the banks' balance sheets. We could use bank stress tests to see what kind of exposure the banks have to climate change. The Governor of the Bank of England proposed that. That is a way of making sure their investments are robust to climate change. Green mortgages would be one aspect of that. Looking at it from the other side of the bank's balance sheet, rather than consumer side, that is also one way of regulating it.

Teresa Bray: Regulating the banks is not what you are trying to achieve. What you are trying to do is improve your housing stock and the commercial sector, which has even worse energy efficiency than housing. You should set your target for what energy efficiency you want and look to regulate that in the long term. The funding will come.

Vernon Coaker: The point is that at the moment, we are failing. It is about how we meet those.

Q127 **Mark Pawsey:** One of the reasons why homeowners are not improving their homes in the way that we might like them to, particularly owner-occupiers, is because there is a lack of trust in the various energy efficiency schemes that have been introduced. We had some evidence



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from Citizens Advice, which told us that households' trust is undermined by substandard work, such as people reporting damp in their property where cavity wall installation has either been installed badly or should not have been installed in the first place. Other households have been put off by what they see as the hard sell. Nobody wants to have people aggressively selling to them. The Government recognise that and have introduced TrustMark, which I know has only been available since October. It is very early days for that. Are we doing enough to make people comfortable and confident in having their homes improved?

Michael Lewis: The TrustMark is a huge step forward. You are absolutely right that there have been terrible examples of poor quality work, poor quality contractors and all the rest of it, which drags trust in the whole industry down. TrustMark is a very important step forward. We need to give it time to build that necessary trust and make sure it is there. It does come at a cost but that is necessary cost to stimulate consumer interest. The other thing is that we talked about green passporting of buildings earlier to create transparency, so that people can see the work that has been done, it is audited and it is there on the database. A national infrastructure priority helps to make it part of the national debate as well. Consumers have to understand that, yes, it is a benefit for them: it increases the value of their house, it reduces their energy bills and it improves the quality of their lives.

Q128 **Mark Pawsey:** Does it increase the value of their house? Is there evidence that if you have two houses side by side on a street, one of which is more energy-efficient than the other, that one is actually worth more? Are people not more bothered about the size of the garden or whether the kitchen appliances are up to date?

Michael Lewis: Of course those things are more important, but as a matter of fact, if your energy bills are substantially lower per year, the net present value of that can be quite significant.

Q129 **Mark Pawsey:** In technical terms, yes. Buying a house is a very emotional thing. Are you telling me that the more energy-efficient house is going to be worth significantly more?

Michael Lewis: What I am saying is that it should do, as a matter of fact.

Q130 **Mark Pawsey:** Absolutely, it should do, but the question is whether it does in practice.

Michael Lewis: You are right that it does not get on to the radar at the moment, which is where things like TrustMark, energy passporting and a national infrastructure priority all become part of the debate when a house changes hands. That creates discussions with the bank and the discussion with the estate agents that bring it to the fore and make it more attractive to have an energy-efficient house. Of course, if you couple that with the variable stamp duty, there is a tangible financial benefit at the point of transaction.



Q131 **Mark Pawsey:** Does TrustMark apply in Scotland?

Teresa Bray: It is just coming in, but it is only one of the aspects. We think that TrustMark on its own is not sufficient. You have to have an independent check of the works carried out.

Q132 **Mark Pawsey:** Has that been lacking in previous schemes?

Teresa Bray: It has definitely been lacking. If you look at the ECO schemes, you have had a maximum of 5% of the properties checked. You have had some very poor quality work. At Changeworks we manage schemes. We have E.ON working for us and we are checking E.ON's work on this to make sure you do not get any of the mistakes you are getting there. We will get them to take work down. That builds the trust so that we are getting people doing external cladding on tower blocks because we have been able to build that trust. You have to have somebody separate checking the work that has been carried out. Householders rely on us to provide that checking.

Q133 **Mark Pawsey:** Mr Matthew, is enough being done to look at historic cases, to give people more confidence in going ahead and getting these works done?

Ed Matthew: I do not know if enough is being done. I know there have been some cases that have been quite high profile and debated even here in Parliament. What is absolutely critical is that they are resolved. People will not do this if they feel they are going to be ripped off, if it is going to be bad quality work, if they are not going to be recompensed if it goes wrong and if it is not going to be fixed. They have to have that confidence.

Q134 **Mark Pawsey:** Do you think TrustMark will make the change we would all like to see?

Ed Matthew: It is a good step forward but it is not enough. Householders have to feel that the work is going to be inspected independently and that there is going to be somebody there, if it is not up to standard, who can make the builders do it again if it is not up to standard.

Q135 **Stephen Kerr:** Does the supply chain have the capacity to deliver a national programme of energy efficiency upgrades?

Ed Matthew: The problem at the moment is that the industry has crashed. Remember that insulations rates went down 95%. At the moment, it does not have the capacity to do what we want right now. This is one of the reasons we are saying, "Create an infrastructure programme." It is the long-term view and the economic infrastructure framework that can provide industry with the confidence to be able to invest in skills and invest in their businesses to make sure we can get the supply the chain up again to the place it should be.

Q136 **Stephen Kerr:** When you talk about the long term, what do you mean



specifically?

Ed Matthew: The Government set a target to get all homes up to EPC band C by 2035. That is a target that is supported by many experts outside of Government. That is right for our carbon budget and where we need to be. That is where we need to get to.

Q137 **Stephen Kerr:** What other steps do we need to take in order to create local supply chains?

Teresa Bray: It is recognising that there is a need for skilling up the local supply chain. If you are going to build the trust for people to take it, they will often want to use your local contractors. A lot of the measures, if you are looking at internal wall insulation, are joinery tasks. How do you engage with the builders' merchants and the local suppliers, to start using different materials, by using insulated plasterboard rather than standard plasterboard?

It is a long-term project, which is why we need a national infrastructure priority to think about all the different elements you have to talk to, whether it is the building merchants, local suppliers, the colleges that are working there or the training that you provide for current tradesmen. We do not have that training. You look to see where the renderers are who are operating across the UK. The vast majority of the ones we are working with are people who have come from abroad because there are not enough skilled craftspeople in plastering. An external wall installation does improve the value of the properties. Where you have these concrete homes and you do an external wall insulation, it does make a huge difference in what you can get for the property and the feel for the neighbourhood, but you are going to need those craftspeople that you are going to have to work to look to train up.

You also have to look at technologies and what other technologies there are. How do you ensure you can make that step change in technologies where they are there but they are still at a small scale, whether it is aerogel insulation, which is much slimmer, so you could install that without worrying about details in older houses that you have? How do you prepare the stock for having low-carbon heat, which is the next challenge that is going to come? What adaptations do you need, whether it is broader pipes for your radiators or areas like that, so you can get more heat in? You have to have that question of how you tie everything together, so you can train people up. People are not going to want to take jobs in these areas if they do not think there is going to be a career there in the long term. You want the stability of demand.

Michael Lewis: That is the fundamental point in talking about the long-term strategic commitment that the Government have to give and the clear policies to get there, like they did with renewables and like they have done with smart meters. We have trained nearly 3,000 smart meter technicians in the last three years because we have to install one or two in every home if you have gas and electricity. The supply chain will come



if people are confident that the demand will be there to justify the investment. Only the Government can create that strategic commitment that gives us the confidence to invest.

Ed Matthew: We must not just think about energy efficiency in this context. We need to think about heat. To reach our Paris commitments, we are going to have to decarbonise every single home in the UK to zero. That means zero-carbon heat. Energy efficiency is a core part of that decarbonisation pathway, because if we do not do energy efficiency, the cost of heat decarbonisation is going to be far greater. They need to be thought about together, which is another reason for an energy infrastructure framework so that we can plan it in one place.

Michael Lewis: That is such an important point. If you do not do the energy efficiency first, you cannot bring all the other things together. The three pillars are that you need to make the current system much more efficient, make each home smart in the way it uses energy, and electrify heating and transport. Those are the three pillars to decarbonisation. If you do not do the first one, you can forget the others.

Q138 **Stephen Kerr:** The key is this long-term commitment to an infrastructure programme around the target of 2035.

Ed Matthew: That is right. It is to decarbonise homes, and part of that is to get all homes up to EPC band C by 2035 at the latest.

Q139 **Drew Hendry:** We were talking about hard-to-treat homes earlier. How can we ensure that homes that are hard to treat, particularly those that are off-grid, are not left further behind in the future?

Michael Lewis: It is a big challenge. There are two things we can say. Hard to treat may be to do with insulation but there are other things you can do, perhaps looking at how efficiently you heat them. Heat pumps are one of the very important ways we can decarbonise. That is certainly something we would push. That goes hand in hand with energy efficiency. You have to get energy efficiency up to a certain level before you can do it. The two go hand in hand.

The most important thing is that, once you have created the strategic commitment and the policy framework, companies will innovate. Innovation will solve that problem. You will find ways of doing it more cheaply. You will find ways of doing it more efficiently. We are, for example, working with a company called Mauer, which has significantly reduced the cost of external wall insulation. It is built offsite, you do not have problems with weather and you can significantly reduce the installation time. That is not necessarily the solution for those houses. The point is that the innovation is there because, through ECO, over a long period, we have invested in innovation. We will do that to a much greater extent if the able-to-pay market takes off.

Teresa Bray: The off-grid properties, in the long term, are going to be heated by electricity. We do not have appropriate tariffs for electrical



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heating that can take advantage of being able to manage the demand as well, so you can reduce the peaks and spikes. Householders do not benefit from the flexibility of your heating supply that you could have if you are electrically heated. We have to look at the tariffs appropriate for electrical heating, to ensure that these feed through.

Q140 Drew Hendry: What different fiscal incentives would you like to see introduced for those households?

Teresa Bray: You have to look at—probably with regulation, because we have already looked at price caps for that—what the associated tariffs are that the industry has to be mandated to start introducing for electrical heating, as that grows within the network.

Q141 Drew Hendry: If there is Government intervention, what fiscal intervention is that going to be?

Ed Matthew: The kind of fiscal interventions we have been talking about, such as 0% loans, will really help. One of the key things for rural areas is that they need the support from their local council to be able to get this done. If you look at how things are done in Scotland, every single council has an area-based scheme. They are looking at their property portfolio, including in rural areas, and thinking about how they get the help to people who really need it. You need a fiscal incentive and financial incentives that can be generous to incentivise people to want the work in the first place, but you need the body on the ground who can get it out there. That is one of the reasons that it is critical that local authorities have a key role to play in this infrastructure programme, because without that, you are not going to reach the right homes.

Q142 Drew Hendry: You have mentioned what is happening in Scotland. To pick up on what has been discussed earlier and that comment, what lessons can be learnt from the devolved nations in terms of targeting within the self-funded market?

Teresa Bray: It is about recognising how complex it is. In Scotland, we still have to go into over a million homes. It is a complex activity. You have to plan ahead, you have to have that long-term support, cross-party support, and you have to look to see how you encourage innovation, which is why having a single issue is not going to reach there. You need to have financial support where appropriate and look at whether it is required for those who are in the greatest fuel poverty. It should not be limited just to capital works. It is about how you build that infrastructure to provide that trust that is required in the market for those trusted intermediaries, whether it is Changeworks, Citizens Advice or other things, to build that trust in the market, which is happening in Scotland. It will take a long time to achieve.

You also have to work with the big players as well, because they can deliver things on a bigger scale, provided you can build that trust, whether it is the major insulation companies or the utility companies through the delivery of E.ON. How the market as a whole works together



is vital to it, which requires a long-term framework, whether it is regulatory targets, building in the trigger for funding that is going to prime the market and thinking about what is actually required overall.

Q143 **Drew Hendry:** What are the key lessons for you, Michael?

Michael Lewis: I was going to come back to the other point you made. If we are talking about vulnerable customers, as I have mentioned a couple of times we need to beef up ECO or funding in that area because the funding for that has fallen. We can do that through health budgets because we know there are significant health benefits in keeping people in their own homes and keeping them warm. We need to think more innovatively about where that funding comes from. If we can get from the current ECO budget of £640 million to £1.5 billion, we can attack some of those more challenging properties, particularly in rural areas.

Ed Matthew: To remind you, under the Treasury's own cost-benefit analysis, energy efficiency investment achieves economic returns as great as any other infrastructure programme. You have to keep that in mind, because the whole time we are thinking about what we can do for rural properties and what we can do for the able-to-pay market or even the fuel-poor, it is couched in this framework of Government saying that we cannot afford it or the Treasury saying that they do not have the money. They do have the money because they are investing a huge amount of money in capital infrastructure programmes. They just need to focus it on the right thing. This investment in energy efficiency will do more than any other infrastructure programme for people across this country. No infrastructure investment could do more.

Q144 **Antoinette Sandbach:** I want to come in with a very quick question. Ms Bray, you spoke about tariffs not being suitable. If we have small-scale renewables in those off-grid areas, would you not then be a prosumer—a producer-consumer—which would therefore help? Should we be incentivising new build house-builders, requiring them to put that small-scale renewable on now?

Teresa Bray: Some of the most interesting work on local energy networks is being done in remote communities because you have the extra costs of both distribution and transmission. It has looked into how you can make those benefit the communities. In the longer term, you do want to look at local generation and how you manage demand, because they have the facilities there and the appropriate technologies for that.

Michael Lewis: It is an important point. You are absolutely right: that is the future. In fact, we have a pilot at the moment, with Berkeley Homes, called the Future Energy Home, which is a house with solar and a battery, with an electric vehicle charger, with a smart meter and with a tablet where you can see exactly where the flows are going, which will enable you to have, with half-hourly settlement and vehicle-to-grid charging, an ebb and flow of power depending on where the cost is at that particular time. That is what we see as the future. All the products and all the tariffs



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we are developing are taking us into that future. I repeat again: if we do not do the energy efficiency piece, we cannot get there.

Chair: Thank you very much to all three of you for coming to give evidence to the Committee today. It has been very informative. Thank you for your time.

Examination of witnesses

Witnesses: David Adams, Peter Jordan and David Thomas.

Chair: Thank you very much to the three of you for coming to give evidence on energy efficiency this morning. David, you might have been here for the first session, which was very informative. We are looking forward to this session as well. We will kick off our questions with Antoinette Sandbach.

Q145 **Antoinette Sandbach:** I would like to ask all of you whether you have any current developments that are being built to standards that predate the 2013 Part L building regulations. If so, how many?

Peter Jordan: We purchase our sites.

Q146 **Antoinette Sandbach:** I am asking you a very direct question: do you have some and, if so, how many?

Peter Jordan: We do. Forty per cent of our sites are currently built to 2013 regulations Part L. Through the previous regulations, we have upgraded all of those homes to our specification for combi boilers, and all of those units, even pre 2013, are Category B SAP ratings between 81 and 91. We have produced energy-efficient homes, whether it is up to current regulations or previous regulations, so we are building above the older regulations on all of those sites.

Q147 **Antoinette Sandbach:** Can you tell me, with 40% of them being built to those standards, how many units that equates to?

Peter Jordan: I do not have that figure in front of me, but I will supply it to you.

David Thomas: For Barratt Developments, we have been built to Part L 2013 standards; 53% of our homes are built to 2013. Again, in terms of EPC ratings, 96% of our properties are built to EPC rating B. Last year, in England we built 15,000.

Q148 **Antoinette Sandbach:** Is every individual property checked to that standard by an independent assessor, or is that the assessment made of your design? I say that because I had a constituent in this week who was in a new build home and had had a heat report done that did not come anywhere close. I suspect it probably did not even make an F, and it is a brand-new home. Is each home individually checked in the way that if I rented a home to rent on a market, it would have an individual assessment, or is that the assessment as to your design, but not necessarily to your delivery?



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David Thomas: It is the assessment against the SAP guidelines. That is the way that properties are assessed.

Q149 **Antoinette Sandbach:** Fifty-three per cent of your homes are built to the 2013 L standard.

David Thomas: Correct.

Q150 **Antoinette Sandbach:** How many units is that?

David Thomas: In total last year, we had 15,200 units built in England, so 53% of 15,200 units.

Q151 **Antoinette Sandbach:** If you market your home at a B rating and somebody has a report done and it indicated that it was not a B rating, would you regard that as requiring remedial measures under the house-builders guarantee scheme?

David Thomas: It depends on what the defect was with regard to the property.

Q152 **Antoinette Sandbach:** Unless you are building out to the standard that the design has come to, then you are mis-selling, are you not, on the basis of a notional energy efficiency rating?

David Thomas: No, I would not agree with that at all.

Antoinette Sandbach: What would you say it was? Perhaps other people are coming on to that.

Q153 **Chair:** It is a very important point. Now we are here, let us get to the bottom of it. If I bought a three-bedroom house and I got into it and it was a two-bedroom house, I would think that I had been mis-sold. If I was told that I was buying a house that was EPC rating B but it turned out, as Antoinette Sandbach is putting to you, that it was not of that rating, is that not mis-selling?

David Thomas: It is not something that we would have put to us. I am not aware of questions being raised by our customers regarding whether our property is EPC rated B or EPC rated C. If you look at the SAP testing, something that the Committee on Climate Change referred to in its report is that it is accepted that there is a variation between the testing and the in-use. It is generally accepted that there is a variation.

Q154 **Chair:** Who is it generally accepted by—by the builders or by the people who are living in these properties? It would be generally expected by me that if I was buying a house that was an EPC B, it was an EPC B.

David Thomas: If you look at Barratt, for example, we undertook a project, the AIMC4 project, which received Government funding going back to 2009, which, as part of the project, looked at exactly this point: what the SAP testing was providing in terms of a rating and then what was happening on an in-use basis. Broadly, there are two elements to it in terms of a variation between the SAP test and the in-use rating. One is



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build and any issues to do with build. As I said, if there were build-related issues, clearly we would address build-related issues.

Q155 **Antoinette Sandbach:** You would.

David Thomas: Of course.

Q156 **Antoinette Sandbach:** Does that apply across the board? Should that apply across the board to any house-builder?

David Thomas: Can I just make the second point? The second point is about in-use. The SAP testing does not take account of every characteristic to do with in-use, such as the number of people living in the house. The SAP testing is a standard calculation. It is not taking account of all the variations that can take place in a property on an in-use basis.

Peter Jordan: From Persimmon's perspective, there would be three reasons why the EPC rating perhaps might have failed: first, the specification of the product that was purchased has not measured up in a real-life scenario; secondly, that the SAP rating has been done incorrectly; or thirdly, that there has been an error of construction. From our perspective, we brought in our own experts and our own SAP calculators.

Q157 **Antoinette Sandbach:** You marked your own homework.

Peter Jordan: No. We brought in SAP assessors, who independently look at all these homes. We have a fabric-first approach towards our homes; getting the insulation in right is the key thing, to ensure that is put in correctly, and that is checked by the building regulations and our own assessors.

Q158 **Antoinette Sandbach:** I appreciate you have not had a chance to come in, David, so maybe I will start with you. If we have current building regulations and standards, why should you not build to those current standards? What prevents you from doing that in 100% of your homes?

David Adams: We are a very small builder, so the question about numbers is rather irrelevant because we are a start-up that is two years old.

In terms of SAP, it is actually worse than you described. The problem is that where planning is given prior to 2013, you also use a prior to 2013 SAP. A B from an engine that is prior to the current one is not the same as a B if you were to run it in the current version of SAP. EPCs last for 10 years. At the point that someone then goes for another new EPC, they will see that SAP drop, so there are a number of things going on here.

In terms of the difference between as built and performance, I have a lot of sympathy for my colleagues who build thousands of homes. The problem here is the building regs require a compliance approach or a



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design approach. The design calculation in most cases is probably correct. There are audits. The point is that you are asking the wrong question.

Q159 **Antoinette Sandbach:** What is the question I should be asking?

David Adams: You want as-built performance.

Q160 **Antoinette Sandbach:** If there is a standard now—as at today's date, if you got planning permission today, you would be required to build to that standard—why should the as-built standard for all homes not be today's standard?

David Adams: It could be.

Q161 **Antoinette Sandbach:** I am asking why it should not be.

David Adams: There is an argument to say that whilst you are building out land and you have a design, do you want to keep changing the design? But there is, in my view, probably a maximum of five years after which the house-builder must go to the new standards irrespective of what planning was given. That is deliverable on the ground as well as moving us from our ridiculous position currently.

Q162 **Antoinette Sandbach:** For enormous house-builders that are making millions of pounds worth of profits, where directors are receiving millions of pounds in remuneration, for Persimmon and Barratt Developments, are you suggesting that it is difficult to design a home that would comply with the current as required standards?

Peter Jordan: As I indicated, in terms of the schemes we have built under the previous regulations, through our group purchasing, through our timber frame factory and our modern methods of construction, we are including all of those elements within the older regulations to bring them up to speed. That is what we have done. We have built over and above those regulations.

Q163 **Antoinette Sandbach:** Sixty per cent of your houses do not.

Peter Jordan: Forty per cent are the current regulations. The 60% that are not are being brought up to that through group purchasing, our grade A windows, our thermal efficiency, our boiler systems, our zonal lighting and everything else. We are doing a lot more than the previous regulations required, because it is the right thing to do.

Q164 **Sir Patrick McLoughlin:** Are these on houses you are building now?

Peter Jordan: Yes.

Q165 **Sir Patrick McLoughlin:** Why are you having to upgrade houses you are building now?

Peter Jordan: Our setup as a company is to try to get the basics right: get the fabric right, get the boiler systems right, get the zonal lighting, climate control, all of those things into the building. We do that because we are set up to deliver 17,000 homes a year to try to expand that. Due



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to that, we have invested with our suppliers and with our supply chains in order that we can get bulk supply of good quality, energy-efficient measures to go into our houses, which allows us to continue with that driver. It is the sensible thing to do, it is the right commercial thing to do and it is the right thing for our customers.

Q166 Sir Patrick McLoughlin: Are you saying that, because you have already ordered things that are not up to the standard of today, you are carrying on fitting those irrespective?

Peter Jordan: No, that is not what I said. I said that all the ordering we are doing now is absolutely in accordance with current regulations and we are providing them in the regulatory homes that are prior to it, to bring their performance up so that every home we build is a good quality, energy-efficient home.

David Thomas: When we moved from 2006 regulations, one of the principles that was put in place was that there would be a period of transition—that it would not be an immediate change. We then moved to 2010 regulations and the same principle. We are now on 2013, so there are complications, not just for the house-builders but also for the building inspectors. To take the point that Peter made, if we are sourcing, for example, windows and double-glazed window units, we are not sourcing different double-glazed window units for different houses. If we are building a three-bedroom house, regardless of which regulations that three-bedroom house is being built under, the most up-to-date and most modern window would be applied to that house. Therefore, when you look at the individual components' properties, what we are delivering is way beyond the respective regulation, whether it be the 2006 or the 2010 regulations. If asked the question, "What percentage of the houses are complying with 2013 Part L?", in our case it is 53%.

Q167 Antoinette Sandbach: What percentage is complying with our current regulations?

Chair: 2013 are the current regulations.

David Thomas: That is not the same as asking about whether we are meeting or exceeding building regulations in relation to different components. On double-glazing or insulation of properties, certainly Barratt and I am sure Persimmon are providing components in insulation that are ahead of the 2006 or 2010 regulations.

Q168 Sir Patrick McLoughlin: Why do you keep referring to 2006 and 2010 when 2013 is the latest ones?

David Thomas: They were the preceding periods. If you are not complying with 2013, you must be complying with 2010 or 2006 regulations.

David Adams: It is at the point you buy the land and get planning permission that fixes your building regs in perpetuity, provided you do



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not go back out for planning, so there are people still building to 2006 regulations.

Q169 **Sir Patrick McLoughlin:** Is that because they got the planning permission in 2005?

David Adams: That is right.

Q170 **Sir Patrick McLoughlin:** It is not really our Committee's responsibility, in a way, but I thought planning permission only lasted for five years.

David Adams: As long as you have started building on that site, it is grandfathered.

Q171 **Mark Pawsey:** Could I ask you, as house-builders, where energy efficiency ranks in the priority of people who are coming on to your sites? Is it more important than the latest kitchen appliances, a nice garden, a nice space to study or whatever? What sort of questions do intending purchasers raise with you and how important is energy efficiency?

Peter Jordan: It is exceedingly important. Through the planning process, we are all trying to build sustainable homes and communities.

Q172 **Mark Pawsey:** I am not bothered about that. I am bothered about people who are buying your houses, as customers, coming on to site. For how many of them is the first question, "How much is this house going to cost to heat?"?

Peter Jordan: You are correct on that. When it comes to energy efficiency, they would like to know that the house is energy-efficient and that the boiler system enables low bills.

Q173 **Mark Pawsey:** You are telling me that is the first question they ask about a property.

Peter Jordan: You asked in relation to energy efficiency.

Q174 **Mark Pawsey:** No. I am asking you where energy efficiency sits in relation to the other attributes of the properties on your site. I have looked at marketing details for both Barratt and Persimmon, and I do not see energy efficiency as being particularly high in the marketing brochure.

Peter Jordan: I tend to agree with that.

Q175 **Mark Pawsey:** So it is not a high priority for many potential customers, okay. Mr Thomas, do you find the same thing?

David Thomas: Yes, it is not a high priority.

Q176 **Mark Pawsey:** Mr Adams, do you find the same thing?

David Adams: People are coming to us because they want a high energy—

Q177 **Mark Pawsey:** My question is about what we can do to raise the public's



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perception about the energy efficiency of the products that you guys are supplying?

David Thomas: One of the things would be that when you look at consumer research for people looking at new build homes, the consumer's perception is that new build properties will be very substantially more efficient than older properties.

Mark Pawsey: That is a safe assumption.

David Thomas: Yes, exactly, and hence why it is not high on a consumer's reasons for purchasing.

Q178 **Mark Pawsey:** You are saying that the customer does not ask about it because it is implicit in the bargain that they are expecting when you deliver the home. In that case, why did the Committee on Climate Change say that if you built to the spec that you should be building to—which is the point Antoinette Sandbach raised with you—consumers could be saving between £70 and £260 on their energy bills? Are they not being misled into believing that the properties are more efficient than they are, and do you accept those figures?

David Thomas: I cannot comment on the figures. I do not know the basis of the figures. What I can say is that, as we touched on earlier, we accept that there is a performance gap between the EPC rating and the performance in use. The industry would accept that.

Q179 **Mark Pawsey:** Do you make your customers aware of that? You have already told us that the assumption of the people coming on to your sites is that your properties are going to be more efficient than the second-hand stock, which is the alternative.

David Thomas: They will be substantially more efficient than the second-hand market.

Q180 **Mark Pawsey:** But you are not able to disclose to the customer that it is not going to be quite as high as what they would expect.

David Thomas: Again, we do not see the energy bills that the customer is receiving and, therefore, perhaps a broad assessment of their in-use experience is out of line.

Q181 **Mark Pawsey:** Do you disagree with the £70 to £260 that the Committee on Climate Change brought forward as being the difference between what people really pay and what they would pay if your homes met the spec that you were supposed to be meeting?

David Thomas: No, I do not disagree. I said I cannot comment on those numbers. I do not know the basis of those numbers. What I am saying is that I do not think we see a lot of customers coming to say, "My energy costs are much higher than I expected them to be."

Q182 **Mark Pawsey:** Do you tell them what their energy costs might be?



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Peter Jordan: It is on the EPC certificate. It indicates to customers what their likely energy bills will be, yes.

Q183 **Mark Pawsey:** In pounds?

Peter Jordan: Yes, it does. It gives them a range as well.

David Adams: It is incredibly difficult to understand, because it is looking at regulated energy, whereas most people buying their electricity and gas may or may not be aware of it, so comparing to the EPC value is problematic.

Q184 **Mark Pawsey:** Is this something that should be looked at then, in your view?

David Adams: Absolutely, and it can be. We do guarantee the performance of our homes.

Q185 **Mark Pawsey:** Would Barratt and Persimmon match Melius in guaranteeing the performance of your properties?

Peter Jordan: We need to examine that through the review of the building regulations.

Mark Pawsey: So the answer is no.

Peter Jordan: A lot of it comes down to insulation, because the boilers are very efficient. One of the elements that we are doing automatically now is we are putting extra over-insulation in. If it requires 300, we put some more in to ensure that the SAP rating is right.

David Adams: The key here is measuring performance, because the AIMC4 programme that Barratt did started in that direction. The industry, albeit small, has come quite a long way in disaggregating householder behaviours from the performance of the property, which builders reasonably can be held accounted to, hence my "as built" rather than "in use". It can be disaggregated, and tools do now exist for, at the point of sale, rapidly testing the thermal performance of the dwelling, for instance. That will improve, I am absolutely certain, especially if Government said that that is what house-builders had to deliver. At the moment, with due respect to my colleagues, they have to deliver a design performance, not the real performance.

Q186 **Mark Pawsey:** You are suggesting that this is an area that Government might look at in order to provide more clarity to homeowners as to what their actual energy bills would be.

David Adams: Clarity for homeowners, but also there are larger carbon and energy savings in closing the performance gap than making the standards more onerous. I am not saying you should not make them onerous, but there is more to be gained by closing the performance gap.

Q187 **Chair:** Can I ask you a question, David Thomas? In terms of the suggestion from David Adams that you build in the performance based on



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real performance rather than the design performance, would you have any issues with that? Would you be happy with those changes?

David Thomas: Not in principle.

Q188 **Chair:** Why not?

David Thomas: No, we would not be unhappy with that.

Q189 **Chair:** You would not be unhappy, so would you be happy?

David Thomas: Yes. Just to make one broader point, we were a signatory to a letter from the UK Green Building Council, going back some 14 months, that went to BEIS and to MHCLG, essentially saying that we recognise, as a company—and many people in the industry recognise—that there is a need for us to get back to a clearly defined carbon agenda. There is not a clearly defined carbon agenda in relation to house-building. Our previous requirement to meet code level 6 and, therefore, zero-carbon homes was pushed back.

Q190 **Chair:** I just want to focus on the question, because I am really quite keen to understand. Who does not want those changes? Does anybody not want those changes, that the EPC is based on real rather than design performance?

David Thomas: There has to be recognition that there is a difference.

Q191 **Chair:** We recognise that, but we just wonder why it is based on the design rather than the real performance.

David Thomas: There are two sides to it, as we have touched on. One is the way in which the design is assessed has to take account of in use. The other is, if we are focusing on fabric first, making sure that the way in which the homes are built is in line with the specification. As a business, we are very focused on that. We have done a lot of work in terms of how we can improve our build processes and ensure that our delivery in terms of the fabric of the building meets the specification.

Q192 **Chair:** Peter Jordan, would you be happy on EPC certificates?

Peter Jordan: In relation to that, we have probably led the field on the fabric-first approach towards it. We have our own timber frame factory—

Q193 **Chair:** Sorry. I am not asking that. I am just asking a simple question: would you be happy for your energy performance certificates to be based on the real performance of your homes rather than what you designed in a lab? Would you be happy with that?

Peter Jordan: If that is what comes through the building regulations, yes.

Q194 **Mr Dhesi:** This question is more for Barratt and Persimmon. In terms of retrofitting, the Committee on Climate Change has explicitly stated that we need to decarbonise our homes by 2050. Mr Jordan, what percentage of the homes that you built last year would need to be retrofitted to meet



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this ambition?

Peter Jordan: If the ambition is a zero-carbon benchmark that you want to get to, all of our homes would be, because they are not built to zero-carbon standards. They are built to 2013 Part L standards, so all of those homes. The question would be whether they could be, because the CCC report is very specific that in order to do it, it would require the homes to have thicker cavity walls, further insulation, new heating systems and a whole range of things, so all of them.

Q195 **Mr Dhesi:** Mr Thomas, what percentage of the homes that you have built would need retrofitting?

David Thomas: One-hundred per cent. They are not built to a zero-carbon standard.

Q196 **Chair:** Can I ask David Adams?

David Adams: We are very small, but all of them are. All the homes are built to zero-carbon standards currently, but it does depend on what the client asks for.

Q197 **Mr Dhesi:** We need to realise those ambitions at some point, but do you accept the CCC's calculations that it will cost up to five times the amount to retrofit your homes compared to the price of building to the appropriate standards from the start?

David Thomas: I cannot comment on that figure. We have not retrofitted our properties and we have not done costings on it, so I could not comment.

Q198 **Mr Dhesi:** Those are the calculations. What I am asking is whether you accept that or not.

Peter Jordan: The report references a report by a company, Aecom. That report has not been made available to us. If it is, our experts will look at it and can answer that question.

David Adams: I am aware of the numbers and think they are reasonable, yes.

Q199 **Mr Dhesi:** Considering the prohibitively high retrofit costs, do you acknowledge that there is a one and only chance to get houses up to ultra-high energy efficiency standards?

Peter Jordan: The direction of travel is absolutely clear and absolutely right. The fabric of homes and the thermal capacity will need to improve, and there will be a step change in doing that through the regulations. The key issue that came out of the report, for me, is whether or not the solution of air-source heat pumps, or rather a gas solution to it, is the correct way to go. The whole industry needs to come together to find the correct solutions to this.

Q200 **Mr Dhesi:** Mr Thomas, what do you think in terms of the high costs of



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retrofitting? It is basically that you need to sort that out from the very outset when you build the house.

David Thomas: Correct. We have built carbon-zero homes, not in the last 12 months but historically. In conjunction with Homes England, we built 200 homes close to Bristol, which were carbon-zero. We have the capability to build those homes, but we would recognise that building carbon-zero homes from the outset has a lot of implications. Cost is one of them, but supply chain is a big implication. There is not necessarily the supply chain of all the materials in place that you would need to build carbon-neutral homes on an industrial scale, so that supply chain needs to be addressed.

Q201 **Mr Dhesi:** Lastly, Mr Adams, what are your thoughts? Within the UK, our house-builders are way behind the curve in terms of what is happening in the Netherlands, with Energiesprong, Passivhaus and so on, and we just are not doing enough to be energy-efficient here.

David Adams: We are well behind the curve, but we are answering the exam question Government are asking. I have every confidence that if that exam question was changed and a zero-carbon definition of some form was implemented, the industry would respond. Regrettably, after the latest 2016 changes were not introduced, you have probably lost 90% of the effort that had been invested over the previous 10 years. In the longer term, set a target and the industry will work to it. I have every confidence they can do it, but just do not blink close to the end, because a lot of people lost a lot of money.

Q202 **Mr Liddell-Grainger:** How much has the price increase of new homes gone up because of Help to Buy? Has there been a noticeable difference in your companies? Has the average price gone up because of Help to Buy?

Peter Jordan: We concentrate on the first-time buyer and first-time mover, and the average price of our homes went up 1% last year.

David Thomas: The average price of our homes went up by about 2% to 3% last year.

Q203 **Mr Liddell-Grainger:** Given that, what is the average profit per house or flat or townhouse or whatever? Do you know what the difference is on the Right to Buy? Has there been an increase in the profit per house?

Peter Jordan: I certainly do not know that figure. If it is within our company accounts, I am perfectly happy to give it to you.

Q204 **Mr Liddell-Grainger:** No disrespect, but it is hard to break down an individual house in your company accounts.

Peter Jordan: We have indicated our average house sales price is £215,000, so you would have to work through our operating margin against that.



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Q205 **Chair:** It has been reported that you make £66,000 profit per house, Peter Jordan. Is that a number that sounds about right to you?

Peter Jordan: If our average house is £215,000, with the operating margin around 30%, it would be about £60,000, yes.

Chair: About £66,000.

Peter Jordan: Yes, that sounds about right.

Q206 **Chair:** Great. It was not that difficult, was it? How much would it cost, Peter Jordan, for each of the homes that you build, to build them to the Passive House standard rather than the 2013 Part L standards that you build them to at the moment?

Peter Jordan: I am not aware exactly what the passive house standard is. I understand what a passive house is; it is an exceedingly energy-efficient home.

Q207 **Chair:** What about a zero-carbon standard?

Peter Jordan: We wanted to have a look at this Aecom report and have our own assessors. We think it has been significantly below what we expect it to be. We thought it was over £10,000 or £12,000.

Q208 **Chair:** What do you think it is now?

Peter Jordan: As opposed to the 1% that was noted in the CCC report.

Q209 **Chair:** One per cent of what?

Peter Jordan: In that report, it was felt that to get zero carbon would be approximately 1% additional build cost. We think it is probably in excess of that, but I am not the expert on it and I have not seen the report.

Q210 **Chair:** What is your build cost? I am just trying to work out the numbers, Peter Jordan, because you do not seem to be willing to give them, so I will try to work them out myself. What is your build cost?

Peter Jordan: In terms of our build cost for the home, the unit, we would normally work on the BCIS published costs, lower quartile.

Q211 **Chair:** Can you just give me a number? You are a house-builder, Peter Jordan. You are coming to give evidence about energy efficiency. I am asking you how much extra it would cost to build a house that was a zero-carbon home or a passive house.

Peter Jordan: My experts indicate to me they thought it would be about £10,000 to £12,000.

Q212 **Chair:** But you just said that you think it might be lower than that; you think that you have overestimated it.

Peter Jordan: No. I beg your pardon. I said that the report indicated it was a percentage of build cost and I could not equate the two things, but



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the overall cost, we thought, would be about £10,000 to £12,000, enhanced energy-efficient fabric and different boiler systems.

Q213 **Chair:** What is your build cost at the moment?

Peter Jordan: I do not have that figure.

Q214 **Chair:** You just told me a minute ago that your house sale price is £215,000, so if we worked out that you make a profit of £66,000 per home, it is about £150,000, but that is including the land cost as well. Presumably, that £150,000 has to be broken down. It would be very easy if you just had some numbers to hand. Is £150,000 the difference between the profit and the sale price?

Peter Jordan: Each plot would have to contribute towards the unit cost, the externals, which is its contribution to roads, streetlight and furniture, the abnormal costs of the development, its share of 106 costs and everything else. All of that is congregated together.

Q215 **Chair:** I am just a little bit surprised that the biggest house-builder in our country does not know the average cost of building a house.

Peter Jordan: It is which element of it. That is where I am struggling with your question.

Q216 **Chair:** I am asking for the average build cost for building a Persimmon home. Are you telling me that, as the biggest house-builder in our country, you do not know?

Peter Jordan: I am indicating the BCIS costings, the lower quartile, is around about £85 or £86 per square foot.

Q217 **Chair:** Let us ask Barratt. Barratt, do you have any idea how much it costs to build a home?

David Thomas: Our average home size would be about 1,000 square feet. We would be looking at a build cost, coming up from foundation, of circa £70,000 to £80,000, on average.

Q218 **Chair:** Thank you very much. That is very reassuring. Are we saying that building a zero-carbon home would add £10,000 to £12,000 to the £70,000 to £80,000? Is that your view, David Thomas?

David Thomas: Yes. There was some work done by MHCLG. They were going from a different starting point from us, a more general starting point, but they estimated about £11,500 of cost to go from existing standards to carbon-neutral.

Q219 **Chair:** That is not for retrofitting; that is building from scratch. A zero-carbon home would cost £10,000 or £12,000 more.

David Adams: I may be wrong, but that is the 2010 baseline, though.

Q220 **Chair:** What is your view, David Adams, of how much extra it would cost?



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David Adams: These guys are pretty incredible at driving supply chains, so I would be very surprised if they did not get it down to £6,000 or £8,000.

Q221 **Chair:** The CCC's report suggests that the cost of building to passive house standards would be £4,800 a home. David Adams, does that sound like a reasonable number or is that too low?

David Adams: That is probably a bit racy, but if you were doing it at scale and that was normal, anything is possible. The reality is that if it was a bit more than that, it still costs five times more to retrofit to it, so it is dancing on a pin, really. It makes sense to put those higher standards in now.

David Thomas: Could I just make one additional point? As David said, the £11,500 was against the 2010 benchmark. One of the things that we have seen in terms of bringing in new technologies, whether it be renewable technologies, for example, is that as we start to do it on a volume basis, costs fall. People are having to estimate what will happen to future costs, but if we were building 100,000 homes to a carbon-neutral standard, then clearly there are potentially very substantial cost benefits that would come from that, which do not necessarily exist just now.

Q222 **Chair:** Peter Jordan, what was the total remuneration to your senior leadership team last year?

Peter Jordan: It was well declared in public in our annual report.

Q223 **Chair:** I am just asking you, or is it another number that you do not know?

Peter Jordan: It was £600 million.

Q224 **Chair:** If it costs about £10,000 per home, how many homes do you build a year?

Peter Jordan: Last year was nearly 6,500.

Q225 **Chair:** You built 6,500 homes last year, so it would cost about £65 million to build them all to a zero-carbon standard rather than the standard you build them to today.

Peter Jordan: That maths sounds about right.

Q226 **Chair:** And how much did you say the total remuneration to your senior leadership team was?

Peter Jordan: I believe it was £600 million.

Q227 **Chair:** So for about a tenth of that cost you could have built all the homes you built last year to a zero-carbon standard.

Peter Jordan: The maths is correct when you put it that way, yes.



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Q228 **Chair:** Basically, as a business, you have to decide what the priorities are, and last year Persimmon decided that instead of building homes to a zero-carbon standard, you would spend 10 times as much of that paying that out to your senior leadership team. Do you think that was a good use of your resources?

Peter Jordan: Clearly, we have learnt some very hard lessons as a consequence of that. The new chief executive and the new chairman have made it very clear that we are going to have to change.

Q229 **Chair:** Was the new chief executive not one of the recipients of these tens of millions of pounds of remuneration?

Peter Jordan: He was. That is correct.

Q230 **Chair:** Presumably he was one of the people on the board who signed off those packages.

Peter Jordan: In 2012, when the package was done, I do not believe that he was, but yes, he benefited from that.

Q231 **Chair:** Did he hand back any of that money?

Peter Jordan: Yes, I believe he did.

Q232 **Chair:** How much did he hand back?

Peter Jordan: I am not sure, but I am happy to give you that figure.

Q233 **Chair:** Yes, could you write back to us with that? Jeff Fairburn received his bonus; I think it was something like £75 million that he received. He said that he would set up a charitable foundation and promised to put £25 million of his waived bonus into that. I cannot see any evidence of him having done that so far. Is it your understanding that he has put £25 million into a charitable foundation?

Peter Jordan: Jeff is no longer with the company. I am afraid that would have to be a question for him.

Q234 **Chair:** When he made that commitment, you did not ask him any further details about it or verify that he had used £25 million of his bonus in that way?

Peter Jordan: As the planning director, that would have been a point for the board, but Mr Fairburn is no longer with the company. The board indicated why that had to be the case and I am not aware of the answer to that question.

Q235 **Chair:** Is your new chief executive putting any of that into a charitable foundation, or has he given the money that he waived back to the business?

Peter Jordan: That is a question for our remuneration committee. The chairman of the company has made it clear that the remuneration committee needs to look at these things very carefully.



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Q236 **Chair:** You say, “Look at these things very carefully”. I am asking a specific question, Peter Jordan. Did your new chief executive hand back any of his bonus last year?

Peter Jordan: Yes, he did.

Q237 **Chair:** How much did he hand back?

Peter Jordan: As I said, I am perfectly happy writing to you with that specific figure.

Q238 **Chair:** Did he hand that back to the company or did he make a donation with it?

Peter Jordan: He did not receive that bonus. I am more than happy to write to you specifically on that number, because it is indicated in our results.

Q239 **Chair:** Could you also ask the chair of your remuneration committee or the relevant person to write back about what commitments Jeff Fairburn made about what he was going to do with his bonus, given that he made a very public declaration that £25 million of that would be put into a charitable foundation? It may be that that charitable foundation has been set up and is doing good work, but I cannot see any evidence of that so far. Could you ask somebody?

Peter Jordan: I will ask the chair of our remuneration committee that question.

Chair: They can write to me with an answer to that question, and if they do not know, perhaps they could look into that in a little more detail, so we can have that reassurance, based on the public commitment he gave when he was the chief executive of your company, not after—when he was the chief executive of your company.

Q240 **Drew Hendry:** What role did developers like yourselves play in the scrapping of the zero-carbon homes policy?

David Thomas: I do not think the developers played a role per se. At the time, the reality was that Government felt that if they were to pursue an agenda of building more homes, they wanted to try to lift the burden.

Q241 **Drew Hendry:** Are you saying your company was in favour of keeping the zero-carbon homes policy?

Q242 **David Thomas:** As I said earlier, in March 2018, we wrote to BEIS and MHCLG, as part of a letter that went from the UK Green Building Council, saying that we felt it was fundamentally important that the Government got zero-carbon homes back on the agenda. We were absolutely at the forefront of building zero-carbon homes in the UK. As I mentioned earlier, we built a zero-carbon development in Bristol in conjunction with Homes England, we undertook research with BRE, et cetera. Barratt Developments was not in favour of the changes that were made, but I understand that Government felt that it was potentially a restriction in



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terms of achieving higher volumes for housing. I can understand that for small or medium-sized developers to achieve a carbon-neutral delivery is not entirely straightforward, and that was one of the concerns, but I am sure there were other concerns that were published at the time when the carbon agenda was rolled backwards.

Q243 Drew Hendry: Peter Jordan, was your company vocally asserting that the zero-carbon homes policy should be retained, or was your company part of the industry that wanted to see it go?

Peter Jordan: At that time, we had invested significantly in timber frame and modern methods of construction, which is a clear part of the report that we are here to discuss today. Through the HBF, it became zero carbon on the basis that it was to get British building to go quickly, but that there would be a review of the building regulations after a moment in time, which was the right thing to do.

In that time, we built up our supply chains. We have worked hard with our boiler manufacturers, with our standard specification and with our Space4 factories to get to a point where we are ready for change. That is what we are all about: to try to get the basic fabric right and the basic specifications right.

Chair: That is not the question that Drew Hendry asked you.

Q244 Drew Hendry: That is not the question I asked you. Did you support keeping the zero-carbon homes policy?

Peter Jordan: I do not believe that we did.

Q245 Drew Hendry: Did your company want to see it go?

Peter Jordan: I believe that we worked with Government and thought the right thing to do to get us building more quickly was to put it on hold and then review the building regulations afterwards.

Q246 Drew Hendry: So you were against the zero-carbon homes policy.

Peter Jordan: At that point in time, yes.

Q247 Drew Hendry: You were not in favour of keeping it. What about you, David Adams?

David Adams: I set up the Zero Carbon Hub and worked on that policy for nine years until it was closed due to lack of house-builder support for the Zero Carbon Hub. It has to be said that Government withdrew their support for the Zero Carbon Hub before. It was a massive missed opportunity and, as a consequence, you are going to be retrofitting, according to the CCC report, an additional 1.5 million homes at least, which was avoidable. What's more, for certainly all the large builders that were buying land between 2012 and 2016, they had already priced in zero carbon.

Q248 Drew Hendry: On that pricing in, it is fair to say that the industry would



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practise pricing in the cost of zero carbon into, for example, land procurement and everything else.

David Adams: For large and mediums that buy land and necessarily have to have a pipeline of land, yes, they price it in. Smaller builders will find it easier to produce zero-carbon homes, because they typically have a lot more control and involvement. Their problems are different and need help. It was not the energy problem.

Q249 **Drew Hendry:** Large developers like Persimmon and Barratt would build those costs into land procurement and so forth; is that correct?

Peter Jordan: No, I disagree with that. When we purchase land, we would purchase the land on the basis of full compliance with current planning policy and with building regulations. Often, a lot of the planning policies, at the time, were to build to code 4, code 5, et cetera. Yes, we would have priced that in, but we would have priced it in accordance with policy at that time.

Q250 **Drew Hendry:** You would be pricing it in according to the zero carbon—

Peter Jordan: No, we would be pricing it in in accordance with what the planning requirements were at that time. We had a lot of policies on the build up to zero carbon that were code 3, code 4 or code 5. We would have priced those in, not zero carbon.

Q251 **Drew Hendry:** During zero-carbon times, you would have been pricing in for future development; is that correct?

Peter Jordan: No.

Q252 **Drew Hendry:** You are saying that you did not price it in at all.

Peter Jordan: We would have been pricing in accordance with the regulations and planning policy in place at the time.

Q253 **Drew Hendry:** You are saying that you did not price it in at all.

Peter Jordan: That is correct, yes.

Q254 **Drew Hendry:** Is that the same for you, David Thomas?

David Thomas: We would have been pricing in code 3 and code 4, because that was the prevailing code at the time.

Q255 **Drew Hendry:** Clearly, when the zero-carbon homes policy was abandoned, there would have been some extra profits involved in that, because you would have already priced beforehand. What happened to those extra profits?

David Thomas: No, there would not have been. We would have been pricing in on code 3 and code 4, because that was the prevailing code at the time. We would not have been pricing in on code 6; that was not the prevailing code at the time. We are building to code 4 standards.



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Q256 **Drew Hendry:** David Adams, you have something to say.

David Adams: We do not buy land; we are a contract producer. It just strikes me as a little bit odd, on the basis that until it was pulled everyone was certain that zero carbon was going to come in in 2016. Buying land in 2015 assuming it was not going to happen sounds strange, but I am not a land buyer; I am not part of these companies. Certainly the impact assessment done by DCLG assume it is priced in.

Q257 **Drew Hendry:** I agree. I would put it to Peter Jordan and David Thomas that any business looking to develop anything in the future would be pricing in to what they are doing the anticipated costs of that business. It seems slightly incredible that that is something your business was not doing with the zero-carbon homes policy.

Peter Jordan: I do not know whether you have misunderstood that. At the point at which we purchase a site, we price in everything that is in accordance with current planning policy and everything in accordance with current building regulations. Often, at that point in time, the planning policy required more than the building regulations, code 3, code 4, which is what Mr Thomas indicated. We priced all of that in. Planning policy and building regulations at zero carbon were in place, at that time, so when we bought all of our land it was absolutely policy-compliant and absolutely priced in in accordance with the regulations at that time.

Q258 **Drew Hendry:** Just to be clear, because I am slightly confused now, what you are saying is that policy was priced in, because you have just said it was.

Peter Jordan: Yes, the code 3 and the code 4 was priced in, but because the zero carbon was pulled, we did not get to code 6.

Q259 **Drew Hendry:** Again, just for clarity for me, for my understanding, you made no anticipation of zero-carbon homes at all.

Peter Jordan: No, because we were purchasing and gaining planning permission, which we must build in accordance with the regulations at that time. As those regulations increase, we will price it all in in the future like that, but we are pricing exactly what we are gaining permission for under the regulations and planning permission.

Q260 **Drew Hendry:** You have an amazing crystal ball in your industry.

David Thomas: The key point is that the delay between contracting on land and planning is not a very substantial delay. If your delay is 12 months or 18 months, it is not a very substantial delay. It is not as though we were making decision about zero carbon for something that was going to happen in four or five years' time when pricing the land, so the prevailing code on almost all developments would have been code level 4.

Q261 **Drew Hendry:** You are saying that there were no discussions whatsoever in your pricing of the zero-carbon homes. There were no



discussions whatsoever.

David Thomas: No, not to buy land. We had discussions to the extent that we were already building zero-carbon homes. As I said, we were building zero-carbon homes at Bristol. We built the Green House with BRE, going back to 2008, which was to a zero-carbon standard. We were aware of the costs relating to zero carbon, but you would not price them in on a land acquisition if they were not applicable.

Q262 **Drew Hendry:** There was no discussion or factoring in for Persimmon either.

Peter Jordan: In relation to that, we have an risk committee. If build costs go up, we have to absorb them, clearly. If a standard comes in and changes, if a new planning standard came in for affordable housing, whatever it would be, if that is not priced in the original deal, regulatory burden, what code of homes you are building at, planning permission and site purchase all happen together. We cost everything in in accordance with all regulations at the point of purchase, and we build in accordance with that.

Q263 **Drew Hendry:** If I understand you correctly, both Barratt and Persimmon completely ignored the zero-carbon homes policy in terms of pricing for the future or for land purchase.

David Thomas: It was not at the point the land was being bought.

Q264 **Drew Hendry:** It was never a factor. We have to move on, but can I just come back to David Adams?

David Adams: That would suggest that a new policy for a new zero carbon could be brought in in two years or fewer, if it is not being priced in. The assumption, certainly when we were working through the Zero Carbon Hub and giving annual indicators far out to the future, was that that was helpful in absorbing the costs in the land rather than passing them on. If that was misplaced, then you do not need to wait until 2025.

Q265 **Chair:** That is a very good point. David Thomas, in your answers to Drew Hendry's questions, you spoke about building zero-carbon homes. You have built zero-carbon homes, have you not?

David Thomas: Yes.

Q266 **Chair:** How much more did that cost compared with the homes you are building at the moment?

David Thomas: At the time, relative to our build cost, it was in the order of £20,000 per property, but this was some time ago.

Q267 **Chair:** That was not at scale.

David Thomas: No. We built nearly 200 homes in Bristol; we built the Green House at the BRE establishment in Watford. Two-hundred homes is clearly a reasonable scale, but it was only one development.



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Q268 **Chair:** David Thomas, you said that the reason the Government got rid of these standards and made the 2013 changes was to increase building volumes. Do you think that you have built more than you would have done because of the relaxation of the standards?

David Thomas: I do not think it has been a particular factor for us. Bear in mind that we were already experimenting with zero-carbon properties and looking at capability. If you look at our housing volumes, our volumes have increased by nearly 50% over the last six years.

Q269 **Chair:** The Government relaxed the standards, so fewer people are going to be living in zero-carbon homes, but you are not building any more homes. It is not a criticism of you; I am just trying to think about what the impact of the policy has been. It has obviously meant that we have fewer zero-carbon homes, but it does not sound to me, David Thomas, as if it is resulting in more house-building.

David Thomas: It is difficult to disaggregate the different reasons, but if you look at house-building volumes, they are up by nearly 70% over the last five years, so the reality is there have been a lot more homes built. In terms of the extent to which that is because of a relaxation in zero-carbon standards, I am not sure you can disaggregate that.

Q270 **Chair:** You understand the building business better than most, David Thomas, so I am asking you for your informed thoughts. You indicated previously you did not think that the relaxation of the standards was resulting in more house-building.

David Thomas: I do not think it has been a significant factor for us. You asked in relation to Barratt and it has not been a significant factor for us.

David Adams: It is not my area of expertise.

Peter Jordan: I am of the opposite view to David Thomas on that. We have upped our production by 75%, opened 1,370 sites. Most significantly, what we did was invest in modern methods of construction, in timber-frame technology and in our own concrete and tyre plants, in order that we are ready. We think we have significantly boosted it, and that was a consequential factor in doing so, yes.

Q271 **Chair:** You think that the relaxation of the standards has meant more house-building.

Peter Jordan: Yes, it helped us maintain our supply chains and push production and growth.

Q272 **Vernon Coaker:** Irrespective of what the Government say, lots of local authorities require higher standards with respect to energy efficiency than necessarily they require, and we have a list of these here. All your companies can meet those standards when you are required to, because obviously you have to; otherwise, you cannot get permission to build. That means there is a patchwork, therefore, of targets across the country.



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Slightly turning the question around from the one I was going to ask, given the importance of really big, national and global companies like yours—and we hope that yours will become, David—do you ever say, “As a corporate responsibility, we are going to go to the highest possible energy efficiency standards, even though we are not required to”? Do you see what I mean? If you were in one part of the country, you would have to do X; if you were in another part, you would have to do Y. Commercially, you could do it at that cost, but morally and as a corporate responsibility, you could say, “Do you know what? We are going to do this.” It goes back to the question the Chair was asking about the use of money. It might not maximise profit, but in terms of energy efficiency, does that ever happen?

Peter Jordan: The patchwork quilt was a problem because, just as you describe there, you were trying to do different things in different places. Our approach towards that was, “We hope all this takes place through the building regulations and everything across the board is done in whatever they come out to.” As I indicated before, we made the decision to move to timber frame, to concrete bricks and we made corporate decisions with our boiler manufacturers. Irrespective of the regulations, we have run that out across all of our homes. We have done the right thing corporately.

David Thomas: At Barratt, we have led the way. I appreciate that, as David has said, he is on smaller scale but, for us, as a large-scale house-builder, we have led the way in terms of zero-carbon standards. Would we implement looking at zero-carbon standards across our whole portfolio? No, but on the other hand, we are writing to Government saying, “You need to reintroduce zero-carbon standards.”

David Adams: The trouble with the regs at the moment is they set a maximum as well as a minimum. For all intents and purposes, it would be really nice if there was some reward for all house-builders, particularly the big ones, from a societal perspective, to go beyond the regs. The earlier session touched on stamp duty, varying it up and down based on the energy performance of the dwelling. This is one area where, if there were an announcement to say, yes, it will be nudged—and I mean an adjustment, not vindictive—then I guarantee that, in the boards of all the majors and the medium-sized players, they would be saying, “What is our advantage here? What is our marketing pitch?” because suddenly, at a point of transaction, there would be a tax advantage for these new homes. There would also be a clear advantage to go above it, and that would be terrifically helpful.

Regs is one important thing, but why not stimulate market demand? Mark asked about pull. If there were a stamp duty adjustment and people came into these showrooms, they would be interested to ask that question.

David Thomas: Another area is mortgages. The mortgage market can be very influential. For example, Barclays bank has launched a green



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mortgage. Therefore, providing more attractive mortgages to customers depending on the environmental credentials of properties is also an important driver.

Q273 Vernon Coaker: I want to finish with one question. David, you referred earlier to the UK Green Building Council letter that you co-signed to Greg Clark, the Business Secretary of State. I will just quote from it: "We agree with the Committee on Climate Change—the Government's official advisory body on meeting our carbon targets—that new build standards should be tightened without further delay. We therefore call on the Government to signal as soon as possible that by 2030 all new buildings should be 'net zero carbon', which means reducing all energy use as far as technically possible, with the remaining demand met through renewables". That seems to be a pretty worthy thing to have co-signed and, presumably, there were lots of other people who did not sign it. Persimmon did not sign it.

Peter Jordan: Not that I am aware, no.

Q274 Vernon Coaker: No, it did not co-sign it. Would you consider looking at that? Do you think that was a mistake? Do you think you should have signed it? Do you know why it was not signed? Would it be something that perhaps Persimmon might join with the other big builders in requesting of the Secretary of State? There is no level playing field otherwise, is there, for everybody? Do you know the answers to any of those questions?

Peter Jordan: As I said at the start of this, the direction of travel in the report is clear. It is about moving in that direction, it is just a question of how quickly we have to move in that direction and that all the supply chains and products are there to allow us to do that. Taking all that into account, we can see exactly where we need to get to; it is a question of how, what means and how long it is going to take. I will put that back to my board and ask that question.

Q275 Vernon Coaker: The 2030 goal is that every new home should be net zero carbon. That is a pretty big target and a good one. As I say, others have signed the letter. Persimmon has not signed it, and I just think it is something you should sign, because it seems to be a level playing field and a good target to have.

Peter Jordan: I am more than happy to put that directly to the board.

Q276 Chair: On the speculation that the Chancellor will unveil a future homes standard in the spring statement tomorrow, from what you were saying earlier, it does not really matter whether these new standards are introduced in two years' time or five years' time. Do you think that if the Government were to introduce a new homes standard, it should be for 2021 or a later date?



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David Adams: On that basis, yes, you could look at 2021-22. There is a training element and a supply chain, but it would pick up pretty quickly with focus and with an absolute belief it would happen this time.

David Thomas: The only proviso would be in terms of existing planning. Where regulations are altered, whether they be carbon or other, as long as it is to future planning, then that is clearly a very different position from existing planning.

Q277 **Chair:** You would be happy with 2021-22.

David Thomas: Yes.

Peter Jordan: I share the view of Dave there. As long as it is moving forward into the future, we know exactly what we have to plan for.

Q278 **Chair:** If the Government announced it, this time you would train your people up and prepare for it, unlike the zero-carbon changes that, as you suggested earlier, you did not really put in the infrastructure to get ready for.

Peter Jordan: I will put that back to my board.

Chair: Thank you very much, all three of you, for coming in to give evidence this morning.