HOUSE OF COMMONS

Energy and Climate Change Committee

Oral evidence: Green Deal watching brief (part 2), HC 1111

Wednesday 7 May 2014

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Watch the meeting

Members present: Tim Yeo (Chair); Sir Robert Smith; John Robertson; Graham Stringer; Albert Owen; Peter Lilley; Dr Alan Whitehead; Dr Phillip Lee; Dan Byles; Christopher Pincher

Questions 131-211

Witnesses: **Holly Sims**, Corporate Affairs Manager, Calor Gas Ltd, **Nick Chase**, Director, Policy and Research, Action with Communities in Rural England (at 09:30); **Dr David Kennedy**, Chief Executive, Committee on Climate Change, **Dr Dorte Rich Jorgensen**, on behalf of Edge, **Dr Nick Eyre**, Environmental Change Institute, University of Oxford (at 10.15)

Examination of Witnesses

Witnesses: **Holly Sims**, Corporate Affairs Manager, Calor Gas Ltd, and **Nick Chase**, Director, Policy and Research, Action with Communities in Rural England, gave evidence.

Q131 Chair: Good morning and welcome. There is some issue that if we start before 9.30, the broadcasters will not pick this up, but I do not think we will allow that to delay us. We would rather get on with the session, as we are under some time pressure.

Thank you both very much for coming in. As you know, we are in the middle of this inquiry on the Green Deal, which is an update on the work we have done before. We promised we would keep a watching brief on it. I have to say—as I am sure you are aware—there is now quite a lot of concern about how it is going compared with the admirably lofty ambitions that were set out when it was launched. We will have something to say about that when we come to write our report.

To start with the question about rural households, which is of interest to quite a lot of us as constituency MPs, as well as in our capacity as members of the Committee. Could you say generally in your experience whether rural households and households who are off the gas grid are able to engage with the Green Deal process?

Nick Chase: Shall I start with that? Based on the results we have had back from our recent survey, which we do every six months for DEFRA, there are significant issues with rural off-grid households engaging. I think one of the main ones is as you go down from size of settlement down to small communities and villages, they are very tight-knit and a lot of people know each other. I mentioned in the evidence that we gave initially, around the issue of rural pride, people are not willing to come forward because they can be stigmatised. Even when we have gone in and presented a much broader approach to what is available, that is still an issue.

I think the problem here is twofold. One is the current situation we find with the energy companies and the publicity. A lot of suspicion about what is free: is it actually free, are there any catches? But really the nub of it is engaging the people who will not come forward and will not self-identify. That is one of the key problems we have found, despite publicity, certainly from DECC and from us. I think this was even evident on the back of the Big Energy Saving Week, when we looked at the results from that, and on the back of the Big Energy Saving Network as well, in terms of champions going in. Sometimes, it is very difficult to convince people that what is free is actually free.

Holly Sims: I would like to pick up on that and agree with everything that Nick has said. Coming at it from an installer perspective, Calor is an accredited Green Deal installer. We haven't installed a single measure via Green Deal to date, so I think that is quite telling. We are probably the best-known brand name for an energy company in rural areas.

When Green Deal was first put forward, we were very excited about it as a concept, obviously, but we did have out doubts as to how effective it would be within rural communities, for all the reasons Nick has just outlined. Rural communities are difficult to engage with. To go and deliver work into a rural community takes more time and it takes more effort. Inevitably, it is more expensive, by the nature of going further and doing more. So I think we were sceptical as to how successful it would be, but we were an interested bystander.

We considered becoming a Green Deal assessor. Our sales force were already endorsed by the Energy Saving Trust, so it would not have been a huge leap for us to become Green Deal assessors. We also looked at being a provider. We were put off both of those processes due to the complexity of the paperwork and all of the process that we had to go through—rightly so, to ensure consumer protection and confidence—but for a business of our size, it was not the right commercial decision for us. I think that has been borne out by the slow start that Green Deal has had. Again, we are still watching it but, like I said, we have not seen the business come through; we are not seeing inquiries from our customers. We get the odd phone call around Green Deal, but there is not a huge level of interest from our customer base.

Q132 Chair: You gave evidence to the DEFRA Committee on this a little while back and raised a question about how much uncertainty there was, particularly in relation to rural households. Do you think there has been a failure on the part of the Government to address the concerns that you and others have raised during the first year of the Green Deal?

Holly Sims: I think "a failure" is perhaps a little strong. There have been issues. The communications campaign around the Green Deal was very small. I know the Government and DECC said the market will promote this. I think that really hasn't happened. I think there have also been significant issues with ECO, which perhaps we will come on to later in the evidence session. But certainly, in terms of communications and in terms of awareness raising, I think there has been a degree of failure in that process, yes.

Q133 Chair: What specific measures could DECC now take to try to make the Green Deal more successful in rural areas?

Nick Chase: That is quite a difficult question in a lot of respects. The evidence that we have had coming back from Green Deal has identified there is confusion about what benefit it delivers. The fact that there is a loan attached to it, and the loan being attached to the property and the fuel costs in the future is a concept I think people find very difficult to grasp. Given the current climate at the moment, people are reluctant—despite how the loan might pan out—to take on another loan. They worry about their house prices as well, if it is associated with it. If next door hasn't got it attached to it and their fuel bills are lower, then you have to consider that.

I am not sure what to suggest, to be quite honest at the end of the day. I think it is one of those conceptual ideas in terms of how it is put together that is quite difficult for people to get their heads around.

Holly Sims: Something that we found when we worked with communities is that getting a local agent on board, someone who is trusted within a rural community, is absolutely key. If you look at any successful initiatives in rural communities—pushing forward broadband, fuel-buying syndicates—there is always one person at the heart of that that leads that group forward. They may be a parish councillor; they might be someone who works on the village hall committee; they might be someone who is retired within the community who takes an active interest; but in any successful rural community, I would suggest you have that type of a person who you need to engage with to bring other people within that community on board.

Like Nick said earlier, rural communities are very close-knit, but they are also quite insular. Certainly, when we have been doing work around fuel poverty in rural communities, finding that trusted agent, whoever they are, engaging them and getting them on board has been the absolute key to the success of the delivery. The difficulty is that that trusted agent might have a full-time job. They might have a family. They might have 100 other demands on their time. Very often, we presume that people will pick things up and run with it because it is the good thing to do, because it is the right thing to do, when, in reality, they have lots of other demands on their time. We have worked with people who deliver meals on wheels; we have worked with the fire service who go in to do safety checks within the homes of elderly people. All of those people can play a part in this, but how do we engage them and how do you get that piece of time when they are already pulled in so many other directions? That could be a really successful way forward, but there is always the issue of funding, timing and so on to overcome.

Nick Chase: If I could follow up briefly on that. I totally agree, but I think the Green Deal possibly represents an issue with representational management because of how it might pan out if you are advocating that this is a good thing to do. As we all know, bad news travels quickly. So, from the point of view of investing time and effort into taking it forward, you have to be very careful to sell the success stories around Green Deal, where it has gone through the process, people are very happy with what they have and can see the end of the journey and the benefits it brings forward.

Q134 Chair: Is there evidence that some parts of the country are doing better than others and it may be more difficult in some areas, perhaps because there are not enough Green Deal providers locally?

Holly Sims: I think the issue of access to Green Deal assessors in rural areas is particularly difficult. I don't have any evidence to say that the north-west has been better than the south-west. What I do know is that when you go on to the Green Deal website and you type in your postcode, if you type in a rural postcode, you are much more limited in the number of companies that come up. I was looking for Green Deal assessors in Cambridge recently because we were running an energy event and I wanted someone to come along and talk about Green Deal and their experience. About three or four down the list, I was already within an 80-mile radius of Cambridge. If I live in a Cambridgeshire village and I am asking someone to come 80 miles to do an assessment for me, I think that is going to be an issue.

I also had a meeting with a rural MP recently, who wanted to talk to me about Green Deal. She said, "Why isn't Calor an assessor," because she had had issues with her constituents in finding an assessor. I said we were an installer but not an assessor. So I think there are issues at that end of the supply chain going out into deeply rural areas. I do believe there are problems there.

Q135 Chair: Will the announcement last week of the Green Deal home improvement fund help people in rural areas or off-grid households?

Nick Chase: I think it will at the end of the day, but it is going to depend on how that information is delivered, the benefits coming from it and how the process works. With Green Deal, there was some evidence given last week that there are around 20 pages of forms to fill in, but when you take out a bank account, there are only five pages of forms. I don't know how true that is, but I know there are a great deal of forms to fill in with Green Deal, and perhaps necessarily so. But I think the additional funding here has to help the process.

Holly Sims: I agree to a point. I have some very real concerns that heating oil and LPG boilers have been specifically excluded from that fund. It is something that Calor particularly is very concerned about. I think the other measures that are included—£6,000 for solid-wall insulation—is fantastic. We really, really welcome that funding. What I think is extremely unfair for rural householders is that, if you want to replace your boiler and you are on heating oil or LPG, you cannot access that funding. It is limited to mains gas only, and I think that is a very real problem with that fund.

Q136 Sir Robert Smith: Is it the same gain, though? If you are sitting there with an old traditional oil boiler or a Calor Gas boiler and you put in a state of the art, modern condensing boiler, will you make the same improvements as if you were on mains gas?

Holly Sims: Absolutely, yes. You will make more savings because there is a lot of evidence to say that particularly old oil boilers go on for a number of years—10, 20, 30 years—so they can be extremely inefficient, G-rated. The savings that you can make—particularly when you consider that fuel prices are higher—for upgrading your boiler from an old-inefficient F or G-rated boiler to a modern A-rated condensing boiler are absolutely huge. You can save hundreds and hundreds of pounds per year. So I would absolutely ask that DECC reconsider that decision to exclude heating oil and LPG boilers. We know there are hundreds of thousands of old, inefficient boilers out there in rural areas, heating some of the most inefficient homes, so there is a double whammy there.

If you could access funding from the home improvement fund to install insulation, alongside a new boiler, into some of our worst-performing properties, you could make a huge difference. That is my biggest plea today, that perhaps DECC would reconsider the decision to exclude heating oil and LPG boilers.

Q137 Graham Stringer: Can we go back to the trust issue? You mentioned if there is a local person who people have trust in then there is likely to be a greater take-up of Green Deal and ECO. Is there anything the Department of Energy can do to increase the trust in Green Deal providers?

Nick Chase: Interestingly, we ran a pilot for one of the Big Six energy companies in two counties who are looking at delivering their ECO and Green Deal on the back of that as well. Again, it comes down to two things. One is a product, understanding what you are getting and the processes of getting that. Secondly, it is the trust that the person telling you about it is trustworthy. We have had instances of hard-selling techniques—shall we say?—when assessors have been around.

It all comes down to the information available. One of the interesting things of those two pilots we ran was a consideration by the company to almost de-brand the literature that was going out, because of adverse publicity—which I think all of the Big Six have suffered from recently—because people are saying, "If it is coming from this energy company, how can it be free? You don't get anything for free." With all the adverse publicity around the Big Six at the moment, it is about guaranteeing that what you are entering into is going to be good for you, at the end of the day.

Coming back to what Holly said, our experience is that you do need a trusted intermediary. What we have seen is a withdrawal of a lot of core funding towards fuel-poverty issues from local authorities. It is not that high on the agenda at the moment, given all the other cuts. It would be around how DECC portrays what you are getting, but I think it has to be backed up with an understanding of what the infrastructure is on the ground, the trusted intermediaries there are to deliver.

Q138 Graham Stringer: What you seem to be saying is that the reputational damage done to the Big Six's reputations is almost insurmountable. Would that be a fair assessment of what you are saying?

Nick Chase: I don't think I would go that far. We are all subject to the publicity that we see in newspapers and television, and bad news always goes faster than good news. I think it comes down to who you believe at the end of the day. We have had some success with village agents in some of our areas who are paid a nominal fee to go out and deliver news, effectively, and what is available to people. These people live in the communities and they are trusted. They are seen down in the local shop. I think that is the key route to combating any adverse publicity that is going around.

This is a Government initiative and that was the focus that this energy company wanted to make clear: "It is the Government. We are delivering it but, however, it is a Government initiative."

Q139 Graham Stringer: How important are interest rates? What are the pros and cons of raising or lowering interest rates on the Green Deal?

Holly Sims: I think the debate about interest rates is a red herring in all of this. If you listen to Greg Barker, he makes a very convincing argument that the interest rate over 25 years is very good. It is the best rate you are going to get out there. You cannot get another rate like that. But that does not get down to the public. The public see the interest rate as too high. Where the interest rate sits is a matter for DECC and the Government, but the problem is the perception of it is too high. No matter what the reality is, whether it is a good deal or not, the perception of it on the ground is that it is an off-putting factor for a number of people. I think that has to be addressed. Whether the interest rate is lowered or you get part finance from other areas. I have seen evidence of people backing with other finance. Perhaps that is a more attractive route.

There is a lot of debate that goes on around the interest rate and trying to convince people that it is a good rate or a bad rate. I don't think that is the issue. I think it is making people understand exactly what they are getting and what their options are that would be the key to this, not fighting over the number or trying to convince people that it is good or bad. I think that is the issue.

Q140 Graham Stringer: A large number of potential Green Deal customers drop out after the original assessment. At what stage are they dropping out and what are the main reasons for that?

Nick Chase: I am not wholly aware of that. But once they have been through the process, the interest rate again is one of the big issues. The other evidence we have is the belief that the benefits they are going to get back from the investment are going to be there for them to see, effectively. I think it is once you have gone through understanding the issue about taking on a loan, the interest rates or the benefits there. Secondly, it is associated with the dwelling. If you do move, then you are moving into a house where your fuel bills are going to be higher for that period.

Q141 Graham Stringer: You mentioned the rural pride issue as being one of the differences between rural communities and urban communities. Are there any other differences between rural communities and urban communities when it comes to take-up of the Green Deal and ECO?

Nick Chase: Apart from the physical nature of where these communities are and the desire of the energy companies to go into them and deliver, predominantly the houses are either hard-to-treat cavity or solid wall, and that is a major issue.

I think close-knit communities are naturally a lot more suspicious and a lot more open to trusted intermediaries talking to them, rather than someone who is cold-calling or coming from out of the area to talk to them about anything.

Q142 Christopher Pincher: Ms Sims, you said earlier on that the key to confidence and take-up is a network of local agents or—as Mr Chase said—trusted intermediaries. What evidence is there of increased take-up where they exist? Do you have any statistical or quantifiable evidence to show their impact?

Holly Sims: I don't have any regarding Green Deal. Like I said, Calor is not involved in that. Certainly, the projects we have been involved with—we ran a project called the Future Rural Energy—for the last four years, working with National Energy Action, working with ACRE and working with the Rural Community Council network. Where that project was the most successful is where we used those intermediaries. In this case, it came through the Rural Community Council network.

Before Green Deal, back in the days of CERT and CESP, we offered free village energy audits to eight communities across England. We went through with NEA, qualified assessors, surveyed the housing stock and then made recommendations and followed it up with a paid survey and then tried to sign those people on to where they could access CERT funding. In the east of England, we had to go to 14 villages before we found one that was willing to take us up on our offer of a completely free energy survey for their village, because there was such a level of suspicion. There was distrust. There was confusion. They were not keen on it. It was not until we found a really, really excellent intermediary, who was the head of the local buying club, supported by the Rural Community Council, that we could get that village to agree to take part. That is the evidence that I have that you need that person. You need someone within a village to take something, pick it up and convince other people, almost go door to door. That is certainly the most powerful evidence that I have seen that that is required. Whether it would be the same for Green Deal, I don't know.

Q143 Christopher Pincher: What was the proportion of take-up in that village which had that intermediary?

Holly Sims: Over all we had over 50% of the households take part, which, for a project such as this, is a really, really high level of participation. We were expecting around the 10% mark. You are never going to get everyone on board. I thought 50% was fantastic. You are not going to get blanket approval or participation, so for me that was a great result.

Nick Chase: We presented evidence that what works best is if you are taking information in on the back of work or relationships you already have with communities, so it is part of the general process of engagement. With the Big Energy Saving Network, we had a number of our Rural Community Councils who signed up to have people trained up. The idea behind it was that you would have champions embedded in communities. When we looked at it, we thought the best thing to do is to train staff in the Rural Community Councils who are going out there anyway, who are trusted—and some of them have worked for 20-odd years in those communities—to have that knowledge, rather than to give it to someone else who suddenly appears to have knowledge around energy efficiency and so on. It was only a few months ago, but the evidence coming back is that that is paying dividends now because these people are trained; they are embedded in the communities anyway. People are willing to listen and willing to trust at the end of the day. Through our infrastructure network, which has taken a bit of a battering due to the recession, we have that innate ability. It is what we exist for, effectively, to work directly with communities as a trusted intermediary. This could be in housing, transport, health or any of those issues. They are all associated.

Q144 Christopher Pincher: There is a mechanism that you think works to deliver this sort of product. Who is responsible for building that infrastructure, do you think, with respect to the Green Deal?

Holly Sims: A few years ago, DECC ran an energy champions project with National Energy Action. We were running a similar rural initiative with NEA alongside that. I don't know what happened to that project, but I think DECC took the time and the money to invest in building an energy champions network. I would be interested to see where those people are and whether that sort of a network could be reinvigorated, because the groundwork is already in place. It was not my project, so I am not overly familiar with it, but I know it happened.

Q145 Christopher Pincher: But you think that DECC ought to be responsible for building that network of local champions?

Holly Sims: I think DECC definitely have a role to play. In Scotland, if you are familiar with the Home Energy Efficiency Partnership—the HEEP programme that the Scottish Government is running—they give funding to local authorities to deliver the work within different areas. So, again, perhaps local authorities have a role to play in driving this forward, but I think it has to be someone other than the energy company who takes responsibility for this because, as Nick has already mentioned, the trust does not exist there.

Nick Chase: I would concur with that. I suppose when you look at the fundamentals of ECO and Green Deal, the elements on the fuel bills are taken forward for the carbon savings. Some people have suggested it would be more equitable if it was on income tax from the perspective that you have people who can't access this who are paying for the benefits of their neighbours, effectively, in that respect.
In terms of DECC taking it forward, I think there is an issue around departmentally who is responsible for energy but also, from the point of view of equitability, who is responsible for funding any initiatives from that perspective, so perhaps a conversation with the Treasury around that might be something that could be done.

Q146 Christopher Pincher: In terms of the funding that is available—£3 million versus the £150 million that has been spent on digital switchover—do you think, first of all, the right amount of money is being spent by DECC, and do you think it is being spent in the right way? What you seem to be saying is we need to invest in a local infrastructure, rather than a top-down message. Is the money right? Can it be used to build up that local infrastructure, or do you think more needs to be spent?

Holly Sims: Clearly, our view is for more money, everybody will. Let's be practical about this, the money is where the money is. I would love to see money coming from Treasury to fund a fuel poverty programme. I know it is something that NEA have advocated for.

Whatever the money is, it is about where it is spent and how it is spent. Like Nick said, local authorities and Rural Community Councils have lost a huge amount of funding over the last few years, and understandably so. But if some of that funding is starting to become available where it can be used in a different way, then I think we need to look at how that money is being spent and where it is being invested.

I think the Green Deal marketing budget was probably misspent. I saw a couple of ads in newspapers when I was in London. I did not see anything at home in Warwickshire, so I think that fund perhaps was not spent in the best way. Again, if we are going to do communications around Green Deal, let's look at what are the right ways to reach people. Is it a full-page ad in *The Sunday Times,* or is it something more local? Are there better ways to get out there with the funding that is available?

Nick Chase: I would agree. Based on the track record of the relationship when we were working with Calor on the Calor FREE project, there is clear evidence there that investment in existing infrastructure organisations will bring the best benefits. If you are trying to convince people to change their habits, their behaviour, and invest their time and effort in energy-saving measures then it has to come from someone they believe in at the end of the day.

Going back to the pilot that we ran with one of the Big Six, for them they said cold calling does not work. Dropping someone in, parachuting someone in who has no history with the community does not work. So I would argue for investment in infrastructure organisation as it currently exists.

Q147 Christopher Pincher: You are very clear on what you think the medium should be, but in terms of rural communities what do you think the message should be to maximise take-up?

Nick Chase: I think it is absolutely clear in terms of saving money and investing in a warmer household. The initiatives are good, but I think the delivery mechanisms are the problem.

Holly Sims: Yes, I agree. It has to be about saving money. We know fuel bills are higher in rural areas. We know that the fuel-poverty gap is much, much higher in rural areas, almost £1,000 as opposed to £400 in urban areas, so I think it has to be a cost-driven message, "You can save money and you can be warmer in your home if you do these things." But also it is about blending the finance. For the able-to-pay in rural areas, absolutely, they ought to be taking out a Green Deal and should be paying for that, but where there is rural vulnerability, let's get ECO funding into rural areas. Currently, that is a huge missed opportunity within ECO. Rural areas are not benefiting from ECO funding. We know that 2% of the measures that went in under Affordable Warmth went into off-gas grid rural areas out of all the funding available, and those are some of the most inefficient, most expensive to heat properties with the highest fuel-poverty gap, so I think that is something that has to be addressed.

Q148 Christopher Pincher: Finally, you are clear on what you think the medium and the message should be, but in terms of follow-through so that people can take-up the message through the medium, do you think that the Green Deal is just too complicated and the process too complex for people to pursue it?

Holly Sims: In short, yes, absolutely. Without someone to take the customer through the journey, as a normal consumer, I wouldn't take it out myself, and I am steeped in this every single day. So I think it is far too complicated.

Nick Chase: I would concur and I think the evidence from the network agrees.

Q149 Dr Lee: In view of that rather damning piece of evidence, what would you have done with the money that was around? Would you have had a simpler project? Would you have built so many homes that were zero carbon and sold them off at 50% to people on low means? Would that have been perhaps a more modest way, but a better way of spending Government money instead of adding complexity on top of complexity?

Holly Sims: Is that with the money that was available from Green Deal or ECO or the total part?

Dr Lee: The whole thing. Keep it simple, is my point. Just aim for 10,000 homes—or whatever the figure is—that use less energy, are properly insulated and newly built in areas where people have challenges paying for their bills.

Holly Sims: I think the issue of new build in rural areas is not going to solve the problem. New build in rural areas is very low at the best of times, and with the current economic climate, rural new build has virtually ground to a standstill, so I don't think zero-carbon new builds—

Q150 Dr Lee: Is that because people are not buying homes? Is that what you mean by the current climate? I am just saying that if the Government are building these homes, it does not rely on the climate—does it?—if they are building the homes and then selling them at a discount.

Holly Sims: If the Government build the homes themselves?

Dr Lee: Yes.

Holly Sims: To be honest, that is not something I have considered or had—

Q151 Dr Lee: What I am trying to get at is was there a simpler way of encouraging people, particularly those whose fuel bills are always going to be challenging—and we all know that is going to be the case going forward or is likely to be—a simpler way of doing it? For example, saying, "We are going to do this. Buy these," and most people are going, "Oh, that's quite a good deal because that's cheaper than the average home in the area."?

Holly Sims: I think you have to address the existing housing stock. I would put aside this idea of building new homes and convincing everyone in rural areas to sell their Cotswold cottage to move into a zero-carbon new-build home. I don't think that is a mass solution. I would park that.

I think it is about addressing the issues with the existing housing stock in a simple way. The premise behind ECO works, but I think it confuses carbon with fuel poverty, or it equates the two together. For me, a very simple thing was under the previous Warm Front, where you had an additional £6,000 available to deliver measures into rural areas to take account of the complexity, the additional cost, the additional time. I would use some money to reintroduce that to encourage the suppliers to go into rural areas by giving them additional funding to do so.

Q152 Dr Lee: Forgive me, I probably cannot afford to have a nice rural idyll in the Cotswolds and I do not particularly think the Government should be subsidising people in a rural idyll in the Cotswolds. Would not the right way be to just let the prices go up and let people join the dots instead of trying to intervene in the market?

Holly Sims: I think there is a huge misconception about what rural idyll is. I think there are huge areas of vulnerability within rural communities, huge areas of deprivation. They are just not as easily identifiable as they are in urban areas. I can perhaps say something about how we identify that in a moment.

As I said earlier, the able-to-pay should pay, and if there is a mechanism like Green Deal that they can take advantage of and that they can engage with in a simple way, I think they should absolutely do that. I am not suggesting that the Government or society prop up the able-to-pay market, absolutely not.

Where I am saying there needs to be some simple assistance is for the rural fuel poor, for the rural vulnerable, and they exist in large, large numbers: 22% of all fuel-poor people live in a rural area. You need to identify who those people are and you need to identify what their needs are. Do they need a new boiler? If so, under Affordable Warmth, only 2% of the boilers that have gone in have gone into rural areas. That needs to be addressed. As we said earlier, that could make a huge difference.

Do they need assistance with solid-wall insulation? Under the current rural safeguard, there have only been 500 or so measures that have gone in under that safeguarded pot of money that was put aside to help rural people. So I think it is about getting the delivery mechanism right. I don't think it is about building new homes or changing the way that you do things. ECO would work, in principle, if the suppliers delivered into the areas that need it the most, and at the moment they are not doing that. They are not doing it because it is more expensive for them to do it, and they want to and they need to deliver at the lowest cost, which I absolutely endorse. Everyone is paying for ECO through their fuel bills, but while the Big Six are not delivering into rural areas, you are not addressing rural energy efficiency, you are not addressing rural fuel poverty and you are not addressing rural vulnerability.

Q153 Sir Robert Smith: Could you just explore that a bit further? You mentioned the 500 schemes in February—I think it was—as the latest statistic. In December, when you put in your evidence, you talked about 51. A statistician would say there had been a tenfold increase.

Holly Sims: I looked at the most recent numbers this morning. Forgive me, I have it written down in front of me because I do not have it committed to memory. Of those 578 measures, 309 have been for loft insulation—221 for top-up and 88 for virgin loft. Over half of those measures going in are tackling the low-hanging fruit, the loft top-ups. There have only been four solid-wall insulation measures out of those 578, and 233 cavity walls. So, again, we are not tackling the hardest to reach, the hardest to insulate. That is not to say we should not tackle the low-hanging fruit, we should. But you talk about the tenfold increase. That 578 is only 0.00085% of all ECO measures installed. For me, that is not a big enough improvement.

Q154 Sir Robert Smith: Is one of the challenges the rural safeguard? Is it too high a population density?

Holly Sims: Absolutely.

Nick Chase: Yes, I totally agree. I think a 10,000 cut-off as a settlement. Having worked at one of the Big Six, the pressure on us to deliver their measures was that we took the low-hanging fruit first. You will go in with campaigns into these bigger areas because you know you will sweep up more people.

The issue underlying it is the confusion between carbon and fuel poverty. That is a big issue. I am due to meet with DECC statisticians next week to talk about how the indices of multiple deprivation and the applicability to this is not working, basically. We worked with a consultancy five or six years ago to unpick the IMD. What it showed up is that there is a lot more deprivation in rural areas that you can see using the IMD. It is a big issue and for me the rural safeguard has not worked, because if you are identifying households in these rural areas that need assistance, then they should get the assistance. It should not be through the ability to cherry-pick what is actually there.

The other issue is whole household solutions, not just going in to say, “We will do the easy ones,” and then they get another knock on the door three months later saying, “We will do your cavity wall,” and another knock six months later saying, “We will do your boiler.” I think that needs to change to do it in one go. I think you will get a lot more buy-in from that perspective, because people will see their energy bills falling almost immediately.

Q155 Sir Robert Smith: The important point you are making about fuel poverty and carbon is obviously that fuel poverty tends to limit the amount that someone can spend on their energy. If you improve the quality of their house, then they are probably still going to spend up to that limit but make proper use of that heat to keep warm rather than heat the country.

Nick Chase: You are absolutely right. We have seen the issue around food banks recently and the heat-or-eat debate. I think we have been lucky this year with a very mild winter. The last winter really focused people’s attention in that respect.

Q156 Sir Robert Smith: Did you mention that if you look at the ECO delivery mechanism, there is a subsidy coming from the rural communities that have missed out to support the urban communities?

Holly Sims: Yes, because we are all paying for ECO through the levy on our electricity bills, so rural and urban alike are paying for it. We are all paying, but only 2% of measures have gone into rural. I would absolutely say that rural at the moment is subsidising urban.

Nick Chase: Yes.

Q157 Sir Robert Smith: How should the ECO strategy change to deliver for rural areas?

Holly Sims: We submitted a response to the recent consultation on the proposed changes, and we agree with a number of the changes that have been suggested, so I am looking forward to seeing how those come through once that process brings forward new rules, so to speak.

I think we would want to see an uplift in the amount of measures that are going into rural areas in terms of boiler replacements. We know at the moment that heating oil and LPG boilers are not being repaired or replaced under ECO. What DECC has proposed is an uplift in the scoring mechanism. I don't deliver ECO, so the scoring mechanism is a little outside of my comfort zone, but I do know that the uplift proposed in the consultation will make at least heating oil boilers much more attractive to ECO suppliers to replace in terms of the carbon credit that they will be receiving for it.

LPG is a different matter. The uplift does not go far enough, in our opinion. We have some issues with the way the uplift has been calculated. I can send our response to the Committee afterwards, if that would be of interest. So I don't think it is going to help LPG; I think it will help heating oil.

What I would personally like to see is if you qualify for a replacement boiler, regardless of the fuel type, you get a replacement boiler. I don't know who delivers that. I don't know whether the Big Six are mandated on a certain number or whether you could mandate a certain proportion based against the number of users of the fuel type, but there are some ideas there about how you could mandate it, so that if you are eligible, you meet the criteria and you have a broken boiler, you get a new boiler regardless of where you live and what fuel you are using. That would be my preferred option.

Q158 Sir Robert Smith: If they got the ECO right, could that blend with the Green Deal to unlock more?

Nick Chase: I would say it probably could. To go back to a point Holly made a while back, I think you would get a lot more traction if you are looking at a community itself getting involved in the process more holistically, rather than targeting individual households. The success you would have in terms of going into a community and getting them on board, effectively.

We do a lot of work with communities, going through neighbourhood planning processes, going through community-led plans and parish plans. This process has sat outside of the general cohesive nature of the planning process of a community, and what I would like to see is it brought into that process. We produce a number of community guides around renewables, heating options and fuel options, so when a community is going through the planning process, they can refer to these and it generates interest. Along with that it is about how you engage and understand your community.

This has been very much focused on individuals taking up the process, but what I would like to see is more of a community process, getting communities galvanised around it and understanding the nature of the problem and how it can do more than just save you money, effectively, in terms of bringing your community together.

Q159 John Robertson: Your figure of 22% of fuel poor is really high. Who supplies this figure?

Holly Sims: That is DECC's figure. That was recent and there is an upgrade by the Fuel Poverty Advisory Group.

John Robertson: Are these done in a regional area, or are they just done in an overall figure, do you know?

Holly Sims: I am afraid I do not know.

Q160 John Robertson: What is the cost of an oil boiler compared to a gas boiler?

Holly Sims: There is an increased cost for LPG and heating oil boilers, but there has been an increase in the delivery cost because the engineer is going further and spending more time on the property to deliver. Our costs for our installations are higher because of the nature of driving for 30 miles instead of driving for three miles, for example. The cost of the individual unit is much of a muchness.

Q161 John Robertson: I live in a rural area. How much would it cost me? How much would it cost if I was to buy a new one?

Holly Sims: That depends on lots and lots of different factors. I can provide you with information after the meeting.

John Robertson: In relation to a gas boiler, a great deal more costly?

Holly Sims: No, not a great deal more costly, perhaps £1,000 or so. But it all depends on the size of the home, the type of boiler and so on.

John Robertson: Per boiler, £1,000 per boiler?

Holly Sims: I would need to provide you with proper figures. I am not a gas engineer. I can do that after the session, but you are looking at an increased cost. It depends on where you live, the type of boiler, whether you are having a full heating system replacement, the types of controls. There are lots and lots of different factors. It would not be right to say an LPG or heating oil boiler costs X more than an actual gas boiler. It is not that simple.

Q162 Chair: Just moving slightly wider than the Green Deal itself, about how to stimulate investment in energy efficiency by households, do either of you have a view about whether we might see a real step-change in people's interest and willingness to do this if they got a direct discount on either the stamp duty at the time of transfer of the property if they agreed to make improvements in energy efficiency perhaps in the first 12 months of ownership, or possibly through discounts on council tax? We are looking at the interesting evidence about how people's car-buying habits have changed for relatively small changes in vehicle excise duty, which only represents a fraction of the costs of running a car but appear to have produced quite a surprising change in car-purchasing habits. It seems to me that there is still a negative image about what is involved in energy reviews, with people coming into your house and messing it up. It is all kind of tedious and difficult, whereas people love to think they are getting a bit of cash out of the taxman. If we want to get a little step-change and kick-start the process, should we be looking at that more carefully?

Nick Chase: I think definitely so. Interestingly, when we ran the pilots on the Big Six, they were looking at incentivisation. Basically, "Here is something for free and in fact we will give you something else for free," which is more of a monetary incentive. I am currently involved with an EU bid that we are putting together, working with both Denmark and Holland. Incentivisation is quite interesting there. They are looking at what they call e-coins, energy coins. The more energy efficient you are, the more you can get these e-coins, which can be spent locally or through other methods. So I think you are on to something there in terms of incentivisation. It could be the tipping point that people need, because that materialisation of the saving in front of them quickly is something that would be well worth looking at.

Holly Sims: Yes, I agree. Whenever we have gone into rural communities, even to engage with people, if we have an incentive, people are more likely to come and engage with us, be it TV power-downs, energy-saving light bulbs. It can be that small. Obviously, that is to get people to come and engage in an energy efficiency event. That would not encourage people to come and take out a Green Deal, but it is the same principle. I have seen lots of talk around the whole stamp duty issue, council tax rebates and so on. I think anything that can be investigated to try to encourage people to take this forward should be done.

Chair: It seems to be important to get people talking about it. There needs to be almost peer-group encouragement. If a significant volume of people try to do this, the thing creates a momentum of its own.

Q163 Dan Byles: What about engaging communities at the community level rather than individual level in that respect? We have an example in my constituency where an entire village came together. They invited a Green Deal presenter to come into the village hall to give a talk to the village and as much as possible they tried to federate—for want of a better word—to try to leverage the advantages for residents in the village as a whole. How much incentive is there for communities to do that rather than just the accumulation of individual incentives, if you see what I mean?

Nick Chase: Our experience shows that that happening is largely dependent on individual people driving that process.

Q164 Dan Byles: If you have a local champion who thinks it is a good idea.

Nick Chase: I think so. On energy, it is generally someone who has a background in the energy sector, who can see the benefits and can galvanise the community. Again, it comes down to that person lives there, so is a trusted intermediary, effectively. But in terms of a community approach I think that is something that definitely needs investigating.

Chair: Thank you both very much for coming in. It has been very helpful for us.

Examination of Witnesses

Witnesses: **Dr David Kennedy**, Chief Executive, Committee on Climate Change, **Dr Dorte Rich Jorgensen**, on behalf of Edge, and **Dr Nick Eyre**, Environmental Change Institute, University of Oxford, gave evidence.

Q165 Chair: Good morning and welcome to the session. As you know, we are getting well through this inquiry on the Green Deal, where we have a watching brief. What we have discovered in the previous evidence sessions is, I have to say, not wholly encouraging about the progress of the Green Deal so far. We may have a few conclusions to draw when we come to write the report later in the summer. We are quite tight for time this morning. We have about an hour to try to get through what we can; maybe just a fraction over an hour.

One of the aims of the Green Deal was to reduce carbon emissions. There were other aims as well, but I think it was projected as one of the flagship policies of the Coalition, in terms of addressing climate change and cutting emissions. What would you say about how far those aims are being met by the savings that are now resulting from the Green Deal and from ECO?

Dr Kennedy: From the Green Deal itself, given that the take-up has been very low, it follows that the carbon saved is also very low. I think that was to be expected, in the sense that if you look at the Government's own impact assessment for the Green Deal, it was targeted at low-cost measures, like loft and cavity-wall insulation, but the impact assessment said it was unlikely to be able to deliver those because it was not really financial barriers that was stopping people taking up those measures; it was other non-financial barriers that were not addressed by the Green Deal. As I said, that was the Government's own impact assessment. It was something that we were very vocal about in the debates at the time.

On the Energy Company Obligation as opposed to the Green Deal, you had CERT that was delivering well on loft and cavity-wall insulation. The Energy Company Obligation shifted the focus to solid-wall insulation, prematurely, we argued, because you should do the cheap things before you do the expensive things. I think even within that the solid-wall insulation has been slow to take off. So it is sensible that what the Government has done in response to that is to shift the focus back from solid-wall insulation in the Energy Company Obligation to those low-cost measures.

Q166 Sir Robert Smith: From a carbon-saving point of view?

Dr Kennedy: Sensible from a carbon-saving point of view, but it is sensible from a cost-effectiveness point of view. There are two points of building a low-carbon economy. You should reduce emissions, and you should do it in the most cost-effective way. The cost-effective way is to do cheap things before you do expensive things, so loft and cavity-wall insulation before you do solid-wall insulation.

Dr Eyre: I pretty much support that. The evidence that I gave to the Committee last year, based on the research that I had done with my colleague, Jan Rosenow, we said we expected a three to fivefold reduction in the scale of energy efficiency activity in the household sector, moving from CERT and Warm Front to Green Deal and ECO. That is pretty much what we are seeing, and it is pretty much what DECC expects to see out to 2020, in terms of their notification under the European Energy Efficiency Directive recently. So I suppose it is as disappointing as we expected and, as David said, as disappointing as DECC's own analysts and economists projected, although that was not perhaps quite consistent with the way that the policy was always presented politically.

Dr Jorgensen: My name is Dorte Rich Jorgensen, representing Edge, and we echo the conclusions. Obviously, given the low uptake, we are not getting carbon reductions at this moment in time. That is why we as Edge prepared a paper and wanted to do something positive and constructive about what does need to happen in order for these carbon reductions to take place. I have seen some figures that if we are going to achieve the 2050 target then we need to deliver on 98% of the easy-to-treat and 95% of the hard-to-treat homes. The pace and the momentum is not there at the moment to be able to deliver on the carbon-reduction targets.

Q167 Chair: Do we have to conclude from all that that it was a mistake to introduce the Green Deal?

Dr Eyre: Yes. I think everyone now knows that. As I said, DECC's own economists and analysts knew that when they produced the impact assessment on the Green Deal. It is just not a surprise. As David said, Green Deal finance has perhaps been even more spectacularly unsuccessful than was predicted. Two hundred homes a month is an absolutely trivial contribution to carbon targets. That is the base we are starting from in Green Deal as defined by Green Deal finance, so Green Deal is used in a rather slippery sort of way, sometimes to embrace the whole package and sometimes just to look at the finance element.

Dr Kennedy: I think we should differentiate between the principle of the Green Deal and how it was introduced in practice. The principle was you could not continue to have 100% subsidy for energy-efficiency improvement for things that would be increasingly expensive, particularly as you got to solid-wall insulation, you would look to get some co-finance of that, and that is what the Green Deal was initially about. But somewhere along the way the Green Deal became the whole story. It was all about this finance instrument, "Let's forget about the obligation aspect of it and move to a completely market-based approach," where the barriers to doing these energy-efficiency improvements are prohibitive. So it differentiated between having a useful co-financing instrument, which can keep the costs of the energy-efficiency programme down to the energy consumer through the uplift in the energy bills, and, "Let's differentiate between that principle and the practice," where this became the whole story and the main instrument to deliver all of these things, which it could never deliver.

Q168 Sir Robert Smith: How much was it to deliver carbon saving or a better comfort in the home if you are taking out a Green Deal?

Dr Kennedy: Was the objective, are you saying, to reduce? There were several objectives. One was to reduce emissions; another was to address affordability constraints by reducing people's energy bills. Then there was another aspect, which is you can improve comfort in the home. Certainly, from our perspective, we stressed the first two of those and quantified the first two of those, without doing a lot of quantitative analysis of the comfort aspect of it, but it is there as additional or co-benefit for us.

Q169 Sir Robert Smith: But for the fuel poor it is a fairly crucial benefit.

Dr Kennedy: It is true that improving comfort for the fuel poor is of paramount importance.

Q170 Chair: Given this has been all a bit of a—perhaps disaster is putting it too strongly. Is it now going to be made worse by the proposed changes to ECO?

Dr Kennedy: I would not say so, in that it has gone back to what it should have been in the first place, which was an obligation to deliver low-cost measures. But within that there are a set of questions that are still outstanding. First of all you can look at: is it ambitious enough on those low-cost measures? For us, it is not. It is not ambitious enough relative to the potential that there is, and it is not ambitious enough relative to the pot of funding that is notionally set aside, which we think could buy more than has been suggested by the Government. That is the first thing.

The second is: well, what do you do after you have done those low-cost measures? Does it then revert to the focus on solid-wall insulation, as originally designed? That is an open question and I don't think we know the answer to that. Or does it become a fuel-poverty instrument, or do you close it down altogether and do something different? So there are a set of questions there.

There is also a question, what is the actual Green Deal, as opposed to the Energy Company Obligation, going to be for? What it is going to pay for? You don't really need the Green Deal to pay for loft and cavity-wall insulation. We are not going to focus on solid-wall insulation for the next three, four or five years. Once you have ticked those off in terms of building fabric measures, what else is there to do from a carbon perspective, from an affordability perspective? Not much. So it is unclear what the Green Deal finance is going to do. Perhaps we can come on to you could use that instrument, if you changed it, to pay for renewable heat instead where there is a finance constraint. But if you do not do that, it is really not clear what the Green Deal part is going to do. The Energy Company Obligation part has an important role but probably needs a lot of bolstering, and there are many open questions at the moment.

Q171 Chair: Can you get the benign outcome of cutting the costs of the Green Deal and the ECO, while also increasing the carbon savings? Is that an obtainable goal?

Dr Eyre: Certainly, by getting the obligation to focus back on the low-cost measures, that is what I would expect that the reform of ECO will do. It is probably worth pointing out that that is the way Energy Company Obligations are used in every other country in the world that uses them: in the United States, in Canada, in Australia, and the very large number of European countries that are now looking at Energy Company Obligations and have looked at our experiences and—fortunately for them—learnt from it. They are using it, as you would expect with a market-based mechanism, to deliver the lowest-cost opportunities. Where they want to do more substantial work, then they are looking at other schemes like loan programmes. I point to one in Germany that we could learn from significantly. The problem with the Green Deal as a loan programme is that the operation of the golden rule precisely prevents it from supporting some of the more expensive and ambitious low-carbon refurbishments that we will need, not now but in the decades as we move towards 2050.

Dr Jorgensen: One of the differences with Germany is obviously that their interest rate is around 2%, so there are creditors on side for Wiederaufbau, which is a development bank that started in 1993, so they are tasked with engaging the retrofitting. They retrofit something like 2 million homes annually in the energy-efficiency programme. But even if we did that and implemented what they are doing, it would take us something like 130 years to get there because we have a much larger building stock to retrofit.

But I think in terms of saying was it right or wrong, I have done development and done work in engineering for 25 years, and my experience is that if you got it right the first time entirely, I would almost be a bit worried, because quite often it does not always work out like that. So it is not working; it is not picking up a number of things that we want. So let's focus on fixing it. What is it that is not working? What do we need to do? We know that we need to lower the interest rate. We need financial incentives. We need regulation. We need something that is driving.

If you think about how much time we have left, I think the important thing is how we are going to spend and invest that time. One of the things, for example, is I have been engaged with the Suffolk local authority and they have been given grants. So, yes, we are coming here and telling you that you need to give us more money. I am sure you are not surprised by that. But they have a pot of money. They are engaged in applying this Green Deal at a community level. One of their members stated that one thing is the top-down approach, but it is also quite key to get a bottom-up approach.

I think one assistance to the Green Deal that is not picking up is trust. You talked earlier about people not wanting somebody to go into their home; they don't trust the workers and so on. What they are also doing differently in Germany is that when they have somebody go in to do an assessment, that person does not walk away and hand it over to somebody else to carry out the installations and so on. That person comes back and says, "You had a look at this offering we did. What do you think?" So there is something about building a community engagement that could really make that work.

Say you have somebody who had a success story—the Green Deal or whatever you call it, whatever it gets reformatted or changed into—where it actually worked. You turn that into a show home. You offer, "If you make your home a show home," you can get more people engaged. Then you start building relationships with a success story of who is prepared to sell and become a case study and sell it on to other people, then bringing in more people and so on. Then you overcome all that resistance to change, the fear and not trusting the works people. Then try to engage some people locally. Who is a Green Deal assessor locally and the trades people? So it also looks like it is regenerating the local economy. Those are the kinds of dialogues we have had.

Also in terms of what else needs fixing, this is like building a momentum, building and creating trust. In Suffolk, they looked at if somebody would offer up their home as a show home to say, "I have had my home retrofitted. I am bringing more people to do it." There are quite a lot of unemployed people. I know they might not want to have their home retrofitted, but actually it is an additional income. You could do that.

Looking at what is not working from the local authority side, one thing that we have identified or discussed was, from a local authority point of view, rather than moving too quickly to have a stand-back approach and look at it. If I look at which kind of homes I have in my local authority, I have some streets over here where you have similar kinds of issues; I have some clusters over here with similar issues. So you pick some that you think, "We can solve these," and focus on them. Get them sorted but not move too quickly. Get the right sort of specialists in. Once you have had your Green Deal assessment done, maybe you need to bring in a building surveyor to make sure you do not just plonk solid-wall insulation on, because there might be damp walls. So you have a bit more strategy in how it is implemented from the local authority perspective. But also making sure that the local authorities have the technical experts in place like building surveyors, they can call in third-party support and deliver it on the ground.

So there is this thing of linking up a trust structure around it, because I think that would really help getting more momentum. Whether the Green Deal is right or wrong, we need to retrofit this country. That is it. Whatever we call it, it does not matter; we have got to solve it.

Q172 Dr Lee: I think I already know the answer to this question. Is the Green Deal, as it is currently set up, working as a major Government energy-efficiency policy?

Dr Kennedy: I think we have answered that, have we? It depends if you take it as a package, though. The Energy Company Obligation part of it is doing something. It could do more and it needs to be bolstered. It is not quite clear what the Green Deal finance aspect of it is there for any more. It became the main part of the story and now it is not. What is it actually going to finance?

Dr Eyre: I think the changes that DECC are consulting on to put cavity-wall and loft insulation back into ECO is effectively an admission that Green Deal finance is not working. I don't suppose DECC will say that in quite that way, but in my view it is effectively an admission of that.

Q173 Dr Lee: Where is it working and where is it failing? Is there any aspect of it where you think, "Yes, fantastic, they got it right on the money there. That's worked really, really well."? No, okay.

Dr Eyre: No, I think there are some elements to it that are worth protecting. I think the aim of getting homes assessed and assessed well is worth keeping, and the aim of accrediting installers and other providers is also important because of precisely the point about trust. If people are not trusted, then the whole thing is going to fall apart. So there are some elements there of the supporting infrastructure that are important, but it is not set up well to deliver low-cost measures and it is not set up well to deliver high-cost measures. The financing is pretty much irrelevant now.

Dr Kennedy: Let's not forgot the fuel-poverty component of the Energy Company Obligation, which is new. Fuel poverty is a major problem in this country, which we did not have a solution to, and this is certainly a part of the solution. I don't think it is a full solution, because it is limited in funding relative to the problem, but it is an important building block.

Q174 Dr Lee: Personally, I think we need to redefine fuel poverty, because if we accept that fuel costs are going up in the medium to longer term, because of finite resource, it means that we are all going to have to spend a greater proportion of our income on fuel, so the definition of whether that means poverty. I would suggest it is more about priority more than poverty.

Dr Eyre: I think the review change does move in that way.

Dr Lee: Yes, but it is a moving target, is the point.

Dr Eyre: It is controversial but—

Q175 Dr Lee: Dr Jorgensen, in your written evidence, you identified six areas of potential improvement for the Green Deal. How would you prioritise these areas?

Dr Jorgensen: How would I prioritise it? The Government is looking at the policy and looking to change it, and I think we also have to recognise that there is an election coming up. I think it is something about—I can't say this is one of the more important things, but I don't think it is the only important thing—DECC and the Treasury finding a way of thinking long term on policy. Whatever happens, for somebody in Edge, we are talking about a national plan, thinking long term in energy policy and say, "Okay, at the end of the day, if we do not do this what are the consequences going to be?" Whoever gets elected, we still have the same consequences and somebody still has to fix it. Things like what we are saying: the benefits of getting a retrofit programme working from the policy-making is a very, very high priority, I think—so the policymakers.

The other thing I would say is that incentives, like the financial aspect, which obviously at this moment in time might be tricky to do, can help consumers get going and something start happening on the ground.

The third thing is in terms of trust and a sponsored promotional campaign where you start targeting people who are willing to do this. We are the kind of people who do this. Edge is a voluntary organisation. We did this because we believe in it and because we know this needs to happen. But start targeting the Green Deal towards those kinds of people because I think they will start giving feedback on what is not working for them and you start to get things moving faster, so I think that would be the third thing.

The fourth thing would be a centralised hub, but that has already been recommended, because you do not want to reinvent the wheel. When you get that feedback, you want to collate it and use it for something so that everybody else does not need to do the same thing. This is where I think the example of Suffolk County Council who are maybe trying to see how they can get a retrofit programme working. So not trying to do the whole country in one go, but focus on this group of people who are really enthusiastic, so get it going and get the feedback and fix it. Maybe we will invest in this area to get it working. How are we going to turn it into—I would not say—a factory, but what is the factory solution that can be rolled out in other places? It is not going to be a factory solution, I know, but you set up something that can easily be picked up as a package for other people. That was my fourth.

Obviously, when you have those people, and the reason why I put the Quality and Assurance (Q&A) aspects a bit lower down is because if they have the will and the belief in it, they might not need as much trust in the system itself, because they will challenge the system.

The other thing is that I had a thought during the bank holiday and I am talking here about how important it is to use the right data. When you do these predictions you are promising the consumer something they cannot deliver on, because the data in SBEM or in SAP is 70% out of what you have been promised and that is not a good basis.

What we are saying is that you need to use real time and real data from energy bills, whoever collects that data. I sometimes wonder—it may have been updated—what would it take for the Big Six to collate their data and make this generic, so you have more information about what is going on in the whole country?

Q176 Dr Lee: What do the other witnesses think about the suggestion about local authorities establishing offices with responsibility for collecting retrofit data and outcomes?

Dr Eyre: I don't think we need local authorities to collect data. One of the areas that I would say DECC is making a lot of progress in is in data collection through the National Energy Efficiency Database and Home Energy Efficiency Database. We have been through this loop before with local authorities collecting data under the Home Energy Conservation Act, and "patchy" would be a good way to put it.

I think where we need local action is much more in delivery and building trust. It is always a good way to get a laugh in a public meeting to point out that we need trust in promotion of energy efficiency, so we have put it in the hands of politicians, energy companies and now added banks on to the list. Of course, I have great faith in all those institutions, but the public in general doesn't.

Local authorities, community groups are definitely better able to do that. I think it is unfortunate that we disbanded the national funding for a network of local energy advice centres in 2011. I think that could be usefully brought back. But there is huge enthusiasm in many parts of the world, as Committee members have pointed out. There are 100 low-carbon groups in Oxfordshire alone, but they are often run on a shoestring and by volunteers. We need to look at a way to provide institutional support to those networks, because they are the people who will get the message out and begin to develop trust. So it is action we need locally, not data collection.

Dr Kennedy: We did a report on the role of local authorities in promoting a low-carbon economy, and the big areas that they can make a contribution is this and the building stock through building trust and working in partnership with energy companies and others to deliver programmes. The problem is that they are not funded to do it anymore. If you look at the resources of local authorities working in this area, it is very patchy. There are some local authorities who make it a priority and do well. Manchester is one and Birmingham is another, but if you look across the country there are limited resources. That is a big gap, for example, if you are trying to have area-based approaches that we know work but are not funded at the moment.

Q177 Dr Lee: Just one final question. Philosophically, do you think individuals have responsibilities to save energy, or do you think Governments do?

Dr Kennedy: It is not a philosophical question, in the sense that we know what the evidence is. If you leave it to people on their own, they will not do it. If you want to meet carbon budgets in the most cost-effective way then you should be targeting energy-efficiency improvements. What are the triggers and the levers that you can pull?

Q178 Dr Lee: What is the evidence for doing it that way? Where is the tipping point here? This current Government—I think with good intentions—has tried to intervene to try to get people to save energy, essentially. Generally speaking, judging by the witnesses today, it has not been particularly successful to date. I wonder where the tipping point is here. Should we leave it to price to drive people into being more energy efficient? Should we say to people, "If you want to be able to afford to heat your home, sort out your house?"

Clearly, there will be people in social housing where there is the responsibility for local authorities or housing associations, but I just wonder—and I broadly want to achieve what you want to achieve, Dr Kennedy—whether the mechanism is perhaps to leave it to people to join the dots themselves.

Dr Kennedy: That is what the Green Deal was about.

Q179 Dr Lee: You can lead a horse to water but you can't make it drink springs to mind here.

Dr Kennedy: We have an example of an approach that works, which was CERT, which was an obligation. It is not a price-based approach. It is a subsidy-based approach, and that has delivered very successfully on loft and cavity-wall insulation, which are the things we should be targeting. We have an approach that does not work, which is a market-based, price-based approach, which is the Green Deal, where uptake was very, very low of these measures where we had a successful policy.

Q180 Dr Lee: What I mean by "price" is the actual cost of gas and electricity.

Dr Kennedy: Absolutely, but that is the same as a free-market approach. The free market responds to price signals.

Q181 Dr Lee: Yes, and that isn't going to work?

Dr Kennedy: It has not worked with the Green Deal. That is all we can say up to now. Will it work in the future? What would make you think it will work in the future?

Q182 Dr Lee: What is the tipping point? Is it just increasing costs, or is it people realising that they have to prioritise energy. I wonder at the moment whether conditions are perhaps too benign for most people, so they do not really care.

Dr Kennedy: They are not that benign in the sense that energy affordability is the major political issue, or was during the last winter. It is a big problem for people and yet they do not respond. Why don't they respond? It is something that is not rational. The rational response is to go and insulate your loft and save money, because you save money doing that. The rational response is to insulate your cavity wall and possibly turn your thermostat down by a degree, depending on how much comfort you have at the moment. The evidence is that people do not respond to those things. There is a philosophic question then: do you leave people to act irrationally, or do you try to help and nudge them and whatever?

Q183 Dr Lee: Yes. What I am trying to get to is, what do you think about that? As a doctor, somebody coming in to me who is morbidly obese, it is like trying to point out the bleeding obvious, basically, "Guess what, you are eating too much and you need to exercise more." It is exactly the same. It is the misuse of energy. It is the over-consumption of energy unnecessarily.

Dr Kennedy: Absolutely.

Dr Lee: You get to a point where you think, "You need to experience morbidity in order to change your behaviour." You get the guy who comes in saying, "I am going to stop eating this because I have had a heart attack." Is it the same when it comes to the use of energy in the home?

Dr Kennedy: Just think of it from a practical perspective. We have carbon budgets in legislation that we are supposed to meet. You can either do it in a cheap way or you can do it in a more expensive way. So the lens you have to bring to that discussion is, if we cannot find ways to enable people to do what ultimately will benefit them, as individuals and households, then it is going to be much more expensive to meet carbon budgets.

Dr Lee: Yes.

Dr Jorgensen: I think that it is a balanced approach. As a doctor, you would not stop telling the obese person that they have to stop eating.

Dr Lee: You do get to a point where you do.

Dr Jorgensen: I know you get to that point. But as you said, we think it would be good that there were some good-news stories about the Green Deal, or retrofit, working that get out there and tell the story and some awareness-raising from the Government saying, "This is going to happen. If you do not it the prices are going to go up." So find a way of engaging the general public in the retrofit agenda. The Government have done it for the stop smoking campaign, for example. Take something like that and adapt it to retrofitting homes and energy and so on, "Would you not want to have done your bit?"

Q184 Dr Lee: Yes, but the stop smoking campaign is helped by the fact that most people have known somebody who died from smoking.

Dr Jorgensen: I know.

Q185 Dr Lee: There is a reality there that people can hang on to. I am not so sure that you have yet reached that point in this particular domain.

Dr Jorgensen: Look at the flooding that is happening at the moment. That is beginning to be evidence that the weather conditions are not working and it is impacting people's homes. So you say, "Look, this is what is happening to them. This could be happening more widely if nothing changes. Therefore, we need the buy in." But that education is not happening, whereas to do with health there has been much more education and awareness raising.

Dr Eyre: I think there is an important philosophical point. As David said, Green Deal is essentially a free market approach that is saying, "Energy efficiency is about private benefits and that is what we should focus on." Of course that is part of the story, but the organisation that David leads is about some of the public benefits of energy efficiency, and the two very important public benefits of energy efficiency are environmental and energy security. The less gas we use, the fewer our energy security problems will be—you reduce energy; I get those benefits—so there is an important public benefit here. The contrast with policy on energy supply is very stark. We are putting very big subsidies towards low-carbon supply technologies, and that is a more expensive way of delivering energy security and carbon emissions benefits than putting money into energy efficiency. So it does make sense to use levies on people, on everybody's bills, to pay individuals to get private energy efficiency benefits because those are irretrievably linked to some public benefits as well.

Q186 Sir Robert Smith: On the Green Deal and the whole thing not working in terms of the take-up of the finance, is there any evidence that it is triggered earlier in the process with the assessment, people taking out their own initiative on the back of the assessment, so delivering the outcome—

Dr Kennedy: Doing things without taking the final step?

Sir Robert Smith: Yes.

Dr Eyre: Yes, I think there is some evidence of that. There is also some evidence that they are getting an assessment and using ECO. Of course that is the rational thing to do.

Q187 Dr Whitehead: You have mentioned the question of the relationship between public benefit and private benefit, and the question of Green Deal finance is clearly related to the idea that you take a financial package out and you will benefit yourself ultimately because that works to your advantage over the long term. We have heard that that has been almost non-existent in take-up. Do you think that is terminal, in terms of the process? Or are there ways in which the financial package could be sold in a more effective way or in itself be made more appealing, i.e. the appeal through rational self-interest that is perhaps behind the finance package? Are there things that could be added to that, or is it something that has had its time and is terminal?

Dr Eyre: As I indicated, I think it is terminal for the low-cost measures, because why would anybody do Green Deal if they can get those measures out of ECO? I think the challenge of retrofitting the whole of the building stock to low-carbon standards is very large and it is not going to be subsidised entirely out of energy bills, as David indicated earlier. We do need to think about reforming a financing package of some sort for those very significant investments. To do that, we need to abolish the golden rule, so that it can support high-cost measures. I think we need to reduce the interest rate to low or supported.

I think looking at the German experience would be very useful there. They have low interest rates for everything, but then even lower interest rates—effectively, negative interest rates—for very low-carbon refurbishment, and they work through the existing retail banks and the mainstream building trade. So, as an earlier witness said, they are not trying to drop this in and invent a new thing. They are trying to reform the way that building refurbishment is done in the country as a whole. I think that is a much better way to think of it than the sort of sticking-plaster approach of, "Let's put in £50 million this month"—or was it £500 million six months ago—with a very short-term approach. This is a long-term problem and it needs a long-term approach.

Q188 Dr Whitehead: This won't be a catch-out session, but you said that you thought the question of Green Deal finance was terminal and then you have said, well possibly reducing interest rates or zero interest rates—

Dr Eyre: I said it is terminal for the low-cost measures. We should be thinking about finance for more ambitious—

Q189 Dr Whitehead: Therefore, that is a combination suggestion, so take golden rule away and change the financing arrangements, i.e. the interest rate?

Dr Eyre: Yes. I am saying we need a financing package. Whether people want to still call it Green Deal or not is a marketing issue.

Dr Kennedy: There is a fundamental question: what do we want to do in terms of measures? If you can identify measures that are expensive but sensible to do—solid-wall insulation is an open question; it might be too expensive to do solid-wall insulation actually is what some of the evidence says—but say we decided as a country that it is a sensible thing to do, then the Green Deal has an important role if you can redesign it. On renewable heat, I've said it is hard to see how we are going to get widespread uptake of heat pumps if you don't find a finance mechanism for those, and the Green Deal is ideal.

As Nick says, the two things you want to do: the interest rates in the Green Deal are very high relative to the Government's cost of funds and that should not be the situation. It is a very secure instrument, so what you should find is that the interest rate is a little bit of an uplift to cover admin costs on top of the Government's cost of funds. The argument is you have this big gap between the Government's cost of funds and the interest rates because it is a new market and there are risks about it. Over time, you would expect those to subside, so you can see a situation where interest rates are 3% and 4%, not 6% and 7%.

Then to finance renewable heat in particular, you cannot have the golden rule within the Green Deal because it does not pay for itself; it needs a subsidy. But the point is, if you extended the Green Deal to cover renewable heat investment the funding from the taxpayer under the Renewable Heat Incentive would fall very significantly. It is an important point for carbon budgets further out in time.

Q190 Dr Whitehead: I think this possibly gets us towards this distinction that we are teasing out, in terms of the relationship between private benefit and public benefit and the suggestion that, say, interest rates could be really low implies that someone somewhere is making those interest rates really low by intervention; in the case of Germany, the state putting money into KfW to enable it to offer loans to regional banks, which then percolated through as very low interest rates. So the question then emerges: is that form of doing it—that is, putting money into assisting a rational choice—a better way of putting some money into the system than simply giving grants to people to do work in the particular circumstances?

Dr Jorgensen: It is certainly an incentive. This is what we are saying. If you go in and identify some key issues like that, like lowering the interest rate, that could help with the uptake. But the other thing is to look at what the key areas are where you can make a financial intervention like variable stamp duty, so that you have a higher stamp duty for a building that is not energy efficient and a lower one for one that is energy efficient. The other thing is things like council rates. Adjust the council rates and, almost like what Phillip was saying earlier, that would help to push the market in the right direction by giving them some incentives, almost like—I won't say punishing—encouraging people to look more at their energy bills in that way; pushing them in the right direction.

Dr Eyre: I think the other way that risk could be reduced would be if it was clear to everybody that this was going to happen in the way that, say, disabled access happened, because Government said, "This is going to be done within the next 10 years," and people did it. If it was clear that you would not be able to sell your house if it did not meet an E rating or D rating—not next year, but in 10, 15 years' time—then people would have a big incentive at the point of moving to make that happen. We are already moving in that direction in the private rented sector, with a proposal to do that for F and G-rated properties in 2018. I think that is a step forward. I appreciate that it is politically difficult to do that for the owner-occupied stock, but I think that will be needed. If we could get a political consensus and a stakeholder consensus to set that target far enough into the future for it not to be a political football, I think that would be helpful.

Dr Jorgensen: There is another thing that someone from Edge mentioned about the financial deal: say you want to sell your home, then obviously the Green Deal is attached to that home, but it might be that the buyer does not think that is a good deal, so they may want to close out the Green Deal at the time of the transaction. Do any of you know how well that has been thought through? That is certainly something that needs looking at.

Q191 Dr Whitehead: Nick, in your jointly authored paper, in 2013, you made quite an issue, I thought of two things. First—you have mentioned this—the question of the relation of the impact assessment to what actually happened. The second one was the question of the hassle factor being quite a substantial barrier, in addition to initial cost, and your perception that the public were perhaps rather more concerned about that than had been taken into account. On the question of the impact assessment, what you appear to be saying—both today and in the paper—is that that was just a great big red-flag warning signed off by the Minister that this was not going to work, or at least not in the way that was being proposed. Would that be your view or is that an overstatement?

Dr Eyre: I do not have detailed access to the decision-making machinery in DECC, so I do not know what happened, but it is pretty clear to me that the consultation document and the impact assessment—while not technically disagreeing with each other—had a very different tone to them.

Dr Kennedy: We sent a very high-profile letter to the Secretary of State saying, “Your own evidence says that this cannot work.” We have got to the situation now where they agree with us.

Q192 Dr Whitehead: Did you base that letter on the impact assessment, or it was a more general view?

Dr Kennedy: It was a more general view, but it was brought into focus with the impact assessment, which had just been published at that time and that was consistent with the broader evidence base that says, “If you have a market-based approach to something, with all of these barriers that we know are present, then you would not expect it to deliver.”

Q193 Dr Whitehead: There is a link. You mentioned, Nick, a very different tone, but the impact assessment was signed off by the Minister and is therefore supposed to tie in with whatever policy is subsequently made, isn’t it?

Dr Eyre: I believe so. I am not an expert on civil service procedure. You might be better placed asking a civil servant or a Minister that question.

Q194 Dr Whitehead: On the question of hassle factor, this also relates to something that was not particularly in the impact assessment, but certainly there were suggestions around the time of the introduction of Green Deal that that was a non-rational approach—some people see it as a very rational approach—to the question of the pain, suffering and annoyance of the process and the extent to which that played a part in decision-making and how the process might be engaged in. I think you reflected that in your paper. Either retrospectively or in terms of looking to the future, what do you think could be done to either change that perception, or ameliorate it, or take measures to assist people who worry about that perception?

Dr Eyre: I think there is a truth to it. Anybody who has had building work done to their house knows that there is some pain attached to it. That is why I think we need to think about energy efficiency within what you might call the normal refurbishment process. People do take that hassle to get a new kitchen or a new bathroom or an extension. If the trades people who are doing that were at the same time selling them improved airtightness or solid-wall insulation or a new heating system, if we had that better joined up rather than trying to separate energy efficiency from the rest of the stuff that goes on in the building stock, I think we would do better. We need to think about it as a housing and building issue and not just as an energy issue.

Q195 Mr Lilley: The first half of the discussion seemed to be based on the premise that there was huge scope for saving on fuel bills, which would greatly exceed the cost of the measures needed to achieve those savings and that the only reason people did not do that spontaneously was that they were irrational. Then when pressed as to what we should do to change it, the answer was: scrap the golden rule, so invest in things where the savings are less than the cost of achieving them. Am I missing something somewhere?

Dr Eyre: Yes. It ties into the point that I have just made about integrating the work with building work. If you want to take out a loan to redo your kitchen and at the same time insulate it better, then there is no way that the saving will pay for your whole new kitchen as well as the insulation work.

Q196 Mr Lilley: No one is suggesting they should.

Dr Eyre: Indeed. But what it means is you are going to have to take out a Green Deal loan to do the insulation work and some other financing mechanism to get your new kitchen. People are not going to do that. They are going to look for one way to finance—at the moment they can get the loan for the kitchen from their mortgage—that will be at a lower interest rate than anything they could get from Green Deal finance.

Dr Kennedy: There are distinctions there. There are certain things that pay for themselves—loft and cavity-wall insulation and a few other measures—and you would not need to scrap the Green Deal, but you probably do not need the Green Deal to pay for those things, anyway, because people will pay for them through other means. Then there is a set of other things that do not pay for themselves, like solid-wall insulation and investment in renewable heat. Those are sensible to do as a country if you are interested in a cost-effective way to meet carbon budgets, because if you do not do those, the alternatives are more expensive. So you have to find ways of reducing the costs of doing those things.

Q197 Mr Lilley: But the scope for the first group of things is not sufficient in itself to occupy us for the time being.

Dr Kennedy: It is sufficient to occupy us for the next several years, so up to 2017 and possibly beyond. There are millions of lofts that still need to be insulated and millions of cavity walls, and that is what the Energy Company Obligation is going to focus on over the next several years. When I say we should open up the Green Deal, for example, to pay for renewable heat, I am thinking longer-term; beyond the next several years as you go into the 2020s, where the focus will shift from lower-cost measures to those that cost more, whether they are energy efficiency or whether they are renewable heat.

Dr Eyre: I would agree with that, except that I think you cannot start a renewable heat market in 2020 and go straight to a high level. We do need to think about developing the supply chain, going through an innovation process. So we need to be starting that on a small scale now.

Mr Lilley: Thank you.

Q198 Chair: Given all the problems with the roll-out of the Green Deal, is that because the marketing was hopeless?

Dr Eyre: No. I think it was a fundamentally flawed proposition. I think there was too much marketing of it

Dr Kennedy: Most people do not know about the Green Deal. The evidence says so. There might have been a lot of marketing that was not effective. The Government does not have a great track record in marketing these kinds of things within the low-carbon space, whether it is energy efficiency or whether it is more efficient vehicles or whatever. Whether there was very effective marketing by the private sector that saw a great market opportunity in this area, you would have to say probably not, again because most people do not know about it.

Dr Jorgensen: I think unless you work in the sector, you would not know about it.

Q199 Chair: Is that because they did not spend enough or because they did it badly?

Dr Kennedy: Let's differentiate. The marketing has been very effective on boiler replacement, particularly by British Gas who uses the Green Deal and the Green Deal subsidy to get people interested in that. For example, there is a lot of radio advertising there and a lot of people have responded to it, because it has been packaged in a way that is attractive to them: you can save a lot of money with the subsidy that is available at the moment if you replace your boiler. That has been marketed well. But the kinds of things we should be focusing on—like the lofts and cavity-wall insulation—are still not a priority for most people in this country. So we need to find different ways to get people interested in doing things that they are not interested in at the moment.

Dr Jorgensen: I think, rather than calling it just a marketing strand, I would look at it as there needs to be a stronger and more effective popular-engagement mechanism in place. If you look at the marketing budget, what we know is there is about £3 million set aside. That is the figure I have found. But if you look at the digital switchover, everybody knew that the digital switchover had to happen and £150 million was used for that. If you look at the importance to the world of global warming versus digital switchover, there is a slight discrepancy there in terms of how much money you put into it.

Also what Phillip was touching on earlier and what you have also raised, if I refurbish my home, there will be a time of discomfort: I am not enjoying it; I wish they were not there. But that public engagement, what we are saying in terms of creating momentum is if you have this first trial group of people who do a really good job of it and become a success story—people that the general public would trust—they are prepared to share their stories and say, whether they used the Green Deal mechanism or not, “Please engage with retrofitting.” Then we start selling them the stories about making a difference to your children now; how it might bring 65,000 construction workers back to work; we are getting new skills, new technology; we try out things; we can actually explore it as a country. So we get some mechanisms in place so that we could demonstrate that it is working, “It might not be a high uptake at the moment but we need you to engage with this.” Britain has done this before.

Phillip was asking the question before: do we think the general public would do this; lower their energy consumption? I was born and grew up in Denmark and I would not have given the answer about the Danish public that you have given. They would engage with energy consumption reduction because that is the culture and that is part of the message from Edge. We say we need to create a culture where, just as we don’t smoke in public anymore, we look after our energy consumption, because it has a consequence for us collectively and we can see this now because of the flooding that is already happening. Then we start at the same time incentivising it financially with what I mentioned earlier, the council tax, the stamp duty. For example, when you were saying refurbishment, next time you refurbish, how about doing your wall insulation and whatever else at the same time, but finding a simpler way of doing it as a mechanism? So we need a stronger public-engagement mechanism and not just marketing. Sell what is in it for them.

Q200 Sir Robert Smith: On the successful marketing of the boiler replacement, does it drag in that if you are going to have the boiler your house has to have a proper loft and—no—but if you were to link the two?

Dr Jorgensen: Exactly.

Dr Kennedy: I think they are aware of the opportunity, in the sense that to get the subsidy—which was available and which is still available—you have to have a Green Deal assessment. So you will know what the set of opportunities is, and then you get some cash back for your boiler and you get your boiler. I think that is probably where most people leave it. There was a proposal that you were going to change building regulations; this Government was thinking about changing building regulations to require loft and cavity-wall insulation as you changed your boiler. That did not end up going anywhere. Whether you rule that out in the future, but it would seem sensible that when you are putting in a more efficient boiler you would also want to leverage that by improving the energy efficiency of your house more generally, if it was made easy for you and if all the barriers were taken away. So that you get that culture shift where you no longer regard doing energy efficiency as a negative, you think it is a natural, sensible thing to do, as they do in Denmark and Germany.

Q201 Chair: I can see that if they announced a programme where you get dramatic reductions in stamp duty or council tax that would electrify the market. I have been an advocate of that for a long time, even if it was only done for a limited period, if there was a three-year window where you could do that. That may or may not happen.

Are there things that can be done locally to engage, to communicate with communities and get them excited? In the previous session, Dan mentioned that the local community ought to act collectively. Can we create some excitement like that?

Dr Jorgensen: I think I talked about the show home idea, didn't I?

Q202 Chair: Yes. You said it was in Suffolk. I have never heard of it. I represent Suffolk and I go there most weeks of my life and read the newspapers. Where is this show home?

Dr Jorgensen: I know they have the initiative. I do not know if there is a show home there. I know they have just been given a grant by DECC and that this would be happening. But one of the things we were talking about in Edge is that say you have a local authority and you say, "These roads over here, they could perhaps do Green Deal for the whole road together," and then you could say, "Well, these roads, come here for a party; your roads are really suitable for X, Y, Z, and here is a demonstration about how you could do that," and you could sign up as a collective to do it together. Then you start with a bottom-up approach as well, working with them.

Dr Eyre: There are a number of Green open home programmes around the country. There is one in Oxford. It attracts a small number of people, perhaps surprisingly large numbers though. I believe hundreds or even thousands in Bristol do go and look at what other people have done to their homes. I think the majority of them are not just being nosey. They are people who are interested in improving their own homes and want to see practically what can be done on the ground in a home like theirs. I think that is the advantage of doing it locally.

Dr Jorgensen: That is what we mean in Edge about the first movers. If you can get some first movers together you start to have that drop that will start creating momentum and waves generally.

Q203 Chair: Will the money that is in the Green Deal Communities Fund help to raise awareness?

Dr Kennedy: Potentially, yes. But I think the issue is that it is limited. You want an ongoing hook, whether it is funding—we talked about possibly reinstating an obligation on local authorities to prioritise this area—whatever lever you use, you want local authorities in particular involved in rolling out energy-efficiency programmes as a partner with area-based approaches. Just a very practical example: my mum, who is a pensioner, who lives in Manchester, who would not have thought about energy-efficiency improvement. The council organised that in her road everybody had their cavity walls filled at the same time. It works because they knock on your door; they explain what the benefit is; it sounds very good; they make it easy; there is word of mouth with the neighbours; everybody gets excited. It is that kind of approach that engages people and gets it done, where it would not have happened otherwise. But for that to happen, you need local authorities to have resources to think about this. Manchester is one that has prioritised it. There are many that just do not have any money in this area to fulfil that role.

Q204 Chair: I am concerned that you cannot even give your mum any awareness though. Does she know what you do for a living?

Dr Kennedy: She does not pay much attention.

Chair: I think we all know the feeling. We are getting late in the day.

Q205 Sir Robert Smith: The most depressing thing I did was go and help install cavity-wall insulation where what we had to do was put a chain down to make sure the neighbour did not get the cavity-wall insulation because they did not want it.

On the earlier discussion, you mentioned dropping solid walls and going for the easier, cheaper, more cost-effective roll-out. How are we to tackle rural areas where obviously the solid wall is a much more prevalent building construction? Is there any strategy that you could come up with for delivering improvements there?

Dr Kennedy: We should not be black and white about solid walls. It is easy to say, "We thought they were cheap. Now they are expensive. We should not do them." Solid walls are very different in different properties. There are some that will be cost-effective to do; there are others that are not, and we need a much more nuanced approach to this. I think there was a complete shift in focus under the Energy Company Obligation that said, "Let's do solid walls." We have to be a bit cleverer than that. It is not that we should not do any solid walls in the future. That must be part of the solution. There is a question of timing as well. You do not really want heat pumps in properties unless you have solid-wall insulation, but you might insulate solid walls at the same time as putting heat pumps in in future, which might be in the 2020s, rather than the second half of this decade. Let's turn it round and say, "Have we got an effective strategy for insulating solid walls and more expensive measures?" I think the answer is, no, we haven't at the moment, and that is a priority for any new Government to start to work out what are we going to do in this area, once we have gone past the low-cost measures and even in parallel, as you say, for the off-gas grid; for the fuel poor and whatever.

Dr Eyre: I think that is right. My personal view is it would help if we began to think about this as an infrastructure issue, to think about the built environment as part of the infrastructure of the country. Infrastructure has a lot of political support. We are seeing some energy projects named in the list of important infrastructure projects. Eight million solid walls—that is a big infrastructure project. It is a very distributed one; it has some different characteristics. I think gaining acceptance that that is going to happen would be a huge step forward.

Dr Jorgensen: If we are to look at the carbon emissions, the built environment is 50% of all carbon emissions; transport is 27% and there is 25% for industry. So in terms of where the energy is being put, and the investment, if you say it is the infrastructure, we are missing out 50% of the carbon emissions if buildings are not looked at as an infrastructure and really targeted.

Q206 Sir Robert Smith: On the more simple system, the fact that the condensing boilers would make a difference whether the fuel is oil, LPG or mains gas but yet the ECO at the moment is delivering only on the mains gas. Are we missing something by not upgrading the boilers for those off the gas grid?

Dr Eyre: I think off the gas grid is perhaps where we should be starting the solid wall work and the renewable heat work.

Q207 Sir Robert Smith: That is the longer term?

Dr Eyre: It depends what you call long-term. It has to start somewhere and that is the most cost-effective place to start it.

Dr Kennedy: It is very attractive for anybody who is off the gas grid, comparing it to an old, inefficient oil-fired boiler. Given that we do need to kick off the renewable heat story again, we have to look over time and say, "We need renewable heat fully rolling out over the next three and a half, four decades," then we have to start somewhere. That is the obvious place to start.

Dr Eyre: That is where DECC is intending to start. That is why the renewable heat incentive is being designed. I think that is now recognised.

Dr Kennedy: There is a question over whether the renewable heat approach is married up with the fuel poverty approach. I suspect it is not. For example, you might think about targeting some of the renewable heat incentive payments to the fuel poor, so that you can meet those two objectives. Again, that is something that needs to be worked out pretty quickly by a new Government.

Q208 Sir Robert Smith: Do you think the ECO definition of rural needs to be a bit tougher, in terms of reducing the population size to what people see as genuinely rural? You can meet your ECO rural commitment with quite a large settlement.

Dr Eyre: I do not have a strong view on rurality. I think it is the nature of the housing stock, whether it is solid wall, which is predominantly rural and inner city, and whether it is off gas, which is predominantly rural and tower blocks. So those are the areas where we can look to start some of the more ambitious work, while the low-cost, low-hanging fruit stuff is done in the bulk of the housing stock.

Q209 Dr Whitehead: In passing, I want to observe that a number of the walls you think are solid walls do not turn out to be as solid as we thought they were. I am not sure whether any of the panel has a view on the introduction of the £6,000 that you can get for solid wall treatment, when we appear to have a rather fluid definition now of what a solid wall actually is, as opposed to a potentially hard-to-treat wall that is not necessarily as solid as the housing survey thought it was.

Dr Eyre: There is clearly more work to be done on that and, indeed, solid walls do not have as poor a thermal performance as was once thought; or some do not. It is a mistake just to say solid walls, cavity walls.

Q210 Dr Whitehead: A final puzzle, I guess, in terms of the changes that have been made in ECO. What appears to me to have happened is that, while it is true that the easier treatments are to be concentrated on by ECO over the next period, that effectively mean that ECO has colonised Green Deal territory. You need to be a pretty strange person at that point to decide you are going to take out a great big Green Deal arrangement, bearing in mind that ECO is now doing what Green Deal did. So does that finally do down the Green Deal, or is it in that way a continuing role?

Dr Kennedy: That was the argument used by DECC, that if we put these low-cost measures in the Energy Company Obligation, then you will not see a market develop under the Green Deal, so we are going to do it under the Green Deal instead, and what we have seen is that the market did not develop and it was unlikely that it ever would. So putting it back in, I don't think you lose anything. We are not forgoing a vibrant market developing for delivery of low-cost measures, because that was never going to happen.

Dr Whitehead: Moving round to our original—

Dr Kennedy: We have almost gone back to CERT but with a bigger element of targeting for the fuel poor.

Dr Whitehead: Yes.

Dr Eyre: I think what we are advocating is instead of saying Green Deal is for low-cost measures and ECO is for the high-cost measures, we are now reaching common sense and doing what every other country does and doing it the other way round.

Dr Kennedy: We have ended up in a sensible position, but it is regrettable that it took us several years to get to that. We might have got there quicker, but we are there now.

Q211 Dr Whitehead: We have ended up in a sensible position with a huge apparatus of sins hanging round the place.

Dr Kennedy: Which could be useful in future. The co-finance aspect of the Green Deal, we could redesign it for the highest-cost measures, as we do them further out in time. As I have said, renewable heat I think is a great opportunity with Green Deal financing the upfront cost of heat pumps if you did away with the golden rule. It is potentially a useful piece of the architecture, but there is more thinking to say exactly what it is going to do now, given where we have ended up.

Dr Eyre: I think it is a mistake to pretend it is going to go on doing what it was set up to do. We should admit that.

Chair: Thank you very much; we have covered some good ground this morning.