



The Scottish Parliament  
Pàrlamaid na h-Alba

## Official Report

# ECONOMY, ENERGY AND TOURISM COMMITTEE

Wednesday 30 November 2011



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**ECONOMY, ENERGY AND TOURISM COMMITTEE**  
**14<sup>th</sup> Meeting 2011, Session 4**

**CONVENER**

\*Murdo Fraser (Mid Scotland and Fife) (Con)

**DEPUTY CONVENER**

\*John Wilson (Central Scotland) (SNP)

**COMMITTEE MEMBERS**

\*Chic Brodie (South Scotland) (SNP)

Rhoda Grant (Highlands and Islands) (Lab)

Patrick Harvie (Glasgow) (Green)

\*Angus MacDonald (Falkirk East) (SNP)

\*Mike MacKenzie (Highlands and Islands) (SNP)

\*Stuart McMillan (West Scotland) (SNP)

Anne McTaggart (Glasgow) (Lab)

**COMMITTEE SUBSTITUTES**

\*Claire Baker (Mid Scotland and Fife) (Lab)

\*Jim Eadie (Edinburgh Southern) (SNP)

\*Alison Johnstone (Lothian) (Green)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Richard Atkins (Royal Incorporation of Architects in Scotland)

Eddie Boyd (Highland Council)

Callum Chomczuk (Age Scotland)

Kevin Christie (Aberdeen City Council)

Norman Kerr (Energy Action Scotland)

Yvonne MacDermid (Money Advice Scotland)

Lindsey Restrick (Scottish and Southern Energy)

Kevin Roxburgh (Scottish Gas)

Rupert Steele (Scottish Power)

Mike Thornton (Energy Saving Trust)

**CLERK TO THE COMMITTEE**

Stephen Imrie

**LOCATION**

Committee Room 6



## Scottish Parliament

### Economy, Energy and Tourism Committee

Wednesday 30 November 2011

[The Convener opened the meeting at 09:32]

### Fuel Poverty

**The Convener (Murdo Fraser):** Good morning and welcome to the 14th meeting of the Economy, Energy and Tourism Committee in session 4. I remind everyone present to ensure that all mobile phones and electronic devices are switched off. We have received apologies from Rhoda Grant, Patrick Harvie and Anne McTaggart.

There is only one item of business on the agenda this morning. The committee agreed previously to schedule an evidence session on the delivery of fuel poverty measures and the support that is available to enable consumers to access them. This morning, we will have three panels of witnesses, who will set out their views on where matters currently stand. We have representatives from consumer support groups, local government and power companies. Later, we will also look at building quality and retrofit issues.

I welcome our first panel of witnesses. Thank you for coming along this morning. I ask you to introduce yourselves and say who you represent.

**Mike Thornton (Energy Saving Trust):** I am the head of the Energy Saving Trust team in Scotland. We deliver energy efficiency programmes to the domestic sector on behalf of the Scottish Government. I imagine that one of the reasons for your inviting me here is the fact that we manage the energy assistance package customer journey on behalf of the Scottish Government.

**Yvonne MacDermid (Money Advice Scotland):** Good morning. I am from Money Advice Scotland. Thank you for giving me the opportunity to address the committee this morning. Our organisation promotes the development of free, independent, confidential money advice. Our members give debt advice to members of the public who seek help. We are increasingly finding that fuel poverty is inextricably linked to other debt problems. Last week, we had a conference at which it became clear that debt is inextricably linked to mental health issues, which puts a burden on the health service. There are real issues for everyone here to try to address.

**Callum Chomczuk (Age Scotland):** I am from Age Scotland, Scotland's largest charity

representing the needs and views of older people. Fuel poverty affects every demographic group in Scotland, but older people are continually the group that is most affected. Even the statistics that were published last week, which showed a drop in the level of fuel poverty across Scotland, recognised that more than 50 per cent of single pensioners are still in fuel poverty. My comments today will reflect that.

**Norman Kerr (Energy Action Scotland):** I am director of the fuel poverty charity Energy Action Scotland, which has campaigned on fuel poverty since 1983. We are a membership organisation and our members range from other voluntary sector and charitable bodies through local authorities and housing associations to installation contractors that deliver energy efficiency measures in people's homes. Our membership stretches from Orkney and Shetland down to Dumfries and Galloway, and the Borders. We cover all of Scotland, advising on policy and campaigning to ensure that people remain interested in fuel poverty and continue to wish to address it.

**The Convener:** What is your impression of the level of public awareness and take-up of the various Government-backed programmes to help people to insulate their homes and replace central heating, for example? We have all been approached by constituents who have concerns about those different programmes and initiatives. Is there enough information about what is available? Is the level of take-up as it should be? What more should be done to promote take-up?

**Mike Thornton:** Around 600,000 homes in Scotland are in fuel poverty, so I guess that the question is how the take-up through the energy saving Scotland advice network, which delivers the customer journey for the energy assistance package, compares with that figure. In 2010-11, we offered about 132,000 people the first and subsequent stages of the package, so we are in the right order of magnitude.

A great deal of work is done to try to ensure that referring organisations have heard of the energy assistance package. For instance, we do about 400 events a month with stakeholder organisations through the energy saving Scotland advice network, and the Scottish Government has run a major promotional campaign for home energy Scotland.

There are built-in and large-scale efforts to ensure that people are aware that a source of help exists. The good thing about the package is that all the different sources of help are accessible from one contact point. More could always be done and there could always be improvements—we do not want to be complacent—but the scale of

the response is in an appropriate order of magnitude.

**The Convener:** I think that you said that there were 600,000 homes in fuel poverty in Scotland.

**Mike Thornton:** Yes.

**The Convener:** How many of those would be eligible for assistance?

**Mike Thornton:** As you will be aware, there are four stages in the energy assistance package. The first stage—the most basic one—is energy advice, and everyone is eligible for that. Then there are income maximisation measures, benefit referrals and referrals for the enhanced or social tariffs—now the warm homes discount—from the fuel suppliers. Everybody is potentially eligible for those.

Your question is a complicated one to answer because, for instance, the benefits check checks a person's eligibility for benefits. In some ways, the person's eligibility for assistance is not about whether they can be referred but about whether they get a result out of the referral. I can give you some exemplar statistics: over the past two years, about 50,000 people were referred for social tariffs or equivalents from the fuel companies.

After that, we get into stage 3, when we consider insulation measures. That is followed by stage 4, which is the programme of subsidy for heating systems and other energy efficiency measures, which is delivered by Scottish Gas. About 40,000 people were referred on to stage 4 during the two years to March 2011.

There are lots of statistics and I have given just a few examples; I hope that they give you the idea that there is a pyramid and that there is a drop-off at each stage of the programme. Even when we get to the top, we are still dealing with tens of thousands of people, but we need to see the figures in the context of the size of the problem, which is probably what was behind your question.

**The Convener:** I will let the other witnesses speak before I bring Chic Brodie in.

**Yvonne MacDermid:** On whether public awareness is as good as it should be, as Mike Thornton said, a lot of work has been done through training that was supported by Consumer Focus Scotland and Energy Action Scotland. We have been involved in that work.

We must acknowledge that there is a difficulty in that people in fuel poverty probably also have other debt problems and might not be as motivated as we would hope or expect to take up the various packages that are on offer. We continually do training with our advisers and promote the various packages. When people come to a money adviser, we hope that the

adviser will assist them with packages and with applications to the various trusts for help with their debt problems. Public awareness could always be better, but it is probably there in many instances; the issue is how motivated people are to think about whether a package will benefit them, at a time when day-to-day living is probably the most prevalent issue on their minds.

**Callum Chomczuk:** There is a perception that a lot of work and hassle are involved even in thinking about applying for any stage of the energy assistance package for older people. I know lots of older people who should be eligible because they do not have central heating in their flats or houses, but who do not want to take the step of applying for assistance because there is a psychological barrier. That is the first thing that we must tackle.

As I said, 600,000 households and more than 50 per cent of single pensioners are in fuel poverty. We need to consider how successful each stage of the energy assistance package is in tackling fuel poverty. Stage 4 has a massive success rate: around 60 per cent of referrals at stage 4 are successful. However, there is only about a 25 per cent referral rate from the Energy Saving Trust for stage 3, which offers subsidised loft insulation. We need to consider whether we are targeting the right people. We know how many households are fuel poor, so why are some people not being referred successfully? If we are targeting the wrong people, we need to direct our measures at the appropriate people, who will benefit from the schemes.

**Norman Kerr:** Energy Action Scotland projects—and the Cabinet Secretary for Infrastructure and Capital Investment, Mr Neil's figures show—that it is likely that 900,000 households in Scotland will be living in fuel poverty by the end of the year, not 600,000 households. The majority of the rise is caused by the increases in fuel prices, which are biting.

I think that people have only recently been able to embrace the term "fuel poverty". Energy Action Scotland has campaigned hard to get the term accepted, but if we stopped people in the street and asked them whether they are fuel poor, the chances are that a lot of people who are would say that they are not. The concept of fuel poverty is difficult for a lot of people to grasp and we need to look at other terminology, such as "providing affordable warmth" or "keeping people warm and healthy in their homes". If you ask someone whether they are fuel poor, they will probably say no; if you ask them whether they struggle to keep their home warm and pay their fuel bills, they will probably answer yes.

We can have the policy discussion here about fuel poverty, but we need to think about the terminology that we use in some of the messages

that we need to get over to people outside—the general public. That translates into how we engage with agencies that support the public. The convener asked whether enough information is out there. A lot of information is out there, but it is a bit like leading a horse to water—we can put out information, but we cannot ensure that it is taken up properly. A lot of the work that the three other organisations on the panel do involves engaging people so that the information gets across.

09:45

Like Yvonne MacDermid, we have recently worked with Consumer Focus Scotland to reach a variety of groups, such as mother and toddler groups and health visitors. We are trying to make them trusted intermediaries who move the message into people's homes. As Callum Chomczuk said, older people in particular see measures as being not for them but for poorer people, although our message is that we have something—whether it is advice or a practical measure—that will support everybody.

A lot of information is out there, but it could be made more user friendly. We need to do a much better job of education with agencies, health visitors, doctors' surgeries, home helps and a range of people, so that they refer people into the system. If someone chapped on your door this evening to offer free insulation, you would be sceptical about that, even if you were eligible for it. However, if your home help told you about free insulation and said that it was okay for you to take it, the chances are that you would be more likely to take it up.

We need to look at our language and how we promote information, and we need to focus on the consistency of the message. Home energy Scotland—Mike Thornton can correct me on the terminology—was created recently, but the message about what we provide for people needs to be put across consistently. People are frightened by the array of acronyms that we use, such as CERT and CESP—the carbon emissions reduction target and the community energy saving programme—and by our range of initiatives. We need a consistent message that people can understand.

The convener asked whether enough is being done. I do not think that it is, but a lot that is being done could be used better.

**The Convener:** I will make an observation on what Mr Kerr just said. My sense is that there is a lot of public confusion about what is available. The impression is that many different programmes have offered different interventions, such as new central heating systems and insulation. A lot of people are not aware of exactly what is on offer. If

people ask, they will be told, but it is not immediately obvious whether people are eligible for assistance and what might be available to eligible people.

**Mike Thornton:** I agree with everything that the other witnesses have said. I will wrap a bit of context around that. When someone calls the advice network, we use exactly the phrase that Norrie Kerr mentioned—that is not surprising, as he worked on introducing the energy assistance package. We do not say, "Do you fancy free insulation?" We ask questions such as, "Are you having difficulty in paying your fuel bills?" or "Do you worry about whether you can heat your home?" If they answer yes, we assume that they are at risk of fuel poverty and we take them down a path that could lead to the rest of the package.

I very much agree with the point about trusted intermediaries, who are the key to overcoming the psychological barriers to the scheme. Our experience is that that has been a relatively slow burn. I will develop that point by describing what tends to happen. We tell home helps that their clients could get free home insulation or could be eligible for a free central heating system. We and others do that work—we promote the service's availability.

However, it is not until they have recommended it to someone and had a client who has benefited from it and had a free heating system that they become ambassadors for the scheme. They can see that they can make a real difference for their clients. There was a slow burn at the beginning of the scheme, but it is now an effective referral route.

The only other comment that I would make is about the variety of different schemes and their accompanying acronyms. It is confusing to clients. The Scottish Government is not in charge of the full variety of schemes as many of them are UK schemes. By using the one-stop shop through the network, we strive continually to show that people should not really need to know what scheme they could get assistance from. They should be able to ring up and say, in effect, "I am fuel poor and I need help", or we will find that out from them and refer them to the most appropriate scheme. There has therefore been quite a successful attempt to declutter the landscape for the customer, because although it is cluttered, they do not need to know how to navigate their way around it. That is the rationale behind the energy assistance package.

**Chic Brodie (South Scotland) (SNP):** For the benefit of the clerks, I declare an interest in that my partner worked for a commercial office space management company that has contingencies in the energy field. That will be relevant when we talk to the architects later on.

At a meeting that I had with one of the major energy companies two weeks ago, I was told that the company's commitment to the CERT programme is undersubscribed. This might be a strong word to use, but one of its gripes was that it could not find the people who needed help. That probably goes back to the decluttering that we talked about. Are the energy companies really engaged in addressing the issue? We have asked them that before. Finding people who require help from the CERT programme should not be too difficult an exercise but, as I said, the company was griping that it could not do that. Have you come across that? Is that a real gripe? If it is real, what can we do to fix it?

**Mike Thornton:** I think that it is real. The energy companies are quite strongly motivated, particularly because the current CERT scheme will be coming to an end fairly soon and they have to achieve their targets. There is a lot of activity to find the right people to give the measures to.

I am sure that Norrie Kerr will have some insight into this. The schemes have been going for a long time and the fruit is being picked from progressively higher up the tree. Many of the people who can have insulation under CERT have already had it, but a lot of people who could have it are not very motivated to take it up. Without wishing to take on the cause of the fuel companies one way or the other, I think it is logical to say that, after several years of CERT and its predecessor schemes, it will now be harder, particularly because the Government has brought in priority and super-priority groups, and also segmented the targets.

What can be done? New and invigorated efforts need to be made to attract people and get them to take up the scheme. That comes back to things like trusted intermediaries, awareness of the schemes and so on.

There are also other issues. I think Callum Chomczuk mentioned a 25 per cent referral rate from the Energy Saving Trust. When we refer people for insulation measures through the energy assistance package—that is done under CERT; we are a source of referral into CERT—the conversion rate is higher than 25 per cent. It will probably be around 40 per cent, partly because there is often a long pipeline.

I accept that there is a significant drop-off. We make a referral when we have had contact with the client, but when the client is contacted by the fuel supplier to survey their house for insulation, they are not contactable. Alternatively, they are contactable, but it turns out that for various technical or other reasons their house is not suitable for insulation—it has the potential to take it, but it cannot actually do so. So even with people who put themselves forward and who are

motivated to get help, we often find that that motivation is relatively transitory and they do not make themselves available for subsequent interaction. That is not a blaming comment in any way; it just reflects the fact that people are often in difficult or vulnerable circumstances and it is hard for them to interact to the required extent if the scheme is to deliver the insulation.

That will no doubt turn your mind to the question whether things could be simplified. That is always an issue. To be honest, it is the first contact back that tends to fail, but somebody has to get out to survey the house. It is a hard nut to crack.

**Norman Kerr:** As Mike Thornton said, the CERT programme and the programme prior to it—the standards of performance programme—have been running for more than 12 years, so we have dealt with a lot of what we might call the low-hanging fruit such as inner-city areas and other areas with a dense population. We are left with many rural areas. One element to consider is the cost to companies of finding jobs. The tonne of carbon saved has a monetary value for the companies, but finding the more expensive jobs costs the companies more money.

That might be addressed through the changes in the new programme—the energy company obligation—through which a tonne of carbon saved in Scotland will have a higher monetary value than a tonne of carbon saved in Bristol. However, at present, the cost for the companies to do a one-off is significantly higher. Therefore, many of them are looking for partners to find that work on their behalf. That tends to be local authorities or housing associations. In the past 10 or 12 years, several local authorities and housing associations have worked closely with the energy companies on substantial insulation programmes over a long period, but we are now dealing with the one-offs. It is time consuming and costly to find the one-off in a street where 50 or 60 people live and then to ensure that that person takes up the offer. That is the issue for the fuel companies—they need to find the person, convert the job and then have a contractor who will undertake the work for the price that is offered.

**Chic Brodie:** The conversation that I had with an energy company did not suggest that that is a difficulty. I was going to ask about local authority engagement, but you have pre-empted that. The suggestion from the particular power company that I spoke to was that it could not get the data. I suggested working with local authorities, but the company did not feel that that engagement was there. However, what you say is encouraging.

I will expand on that in a minute, but I want to return to the issue of messages. I am aware of the work that Norrie Kerr has done with Energy Action Scotland, and we look forward to the fuel poverty

forum addressing some of the major issues. Marketing messages are great, and it would certainly be helpful to have those in doctors surgeries. The most vulnerable section in the fuel poverty stratum is the elderly and we need to consider how we reach out to them. I will not declare my age, but I recently had a communication from Age Scotland saying that it has set up a relationship with a power company. It did not say that the company would reduce the number of tariffs—although we are now going down that road—but it wanted people to switch to that company. Part of the welcome pack was a hypothermia thermometer. Callum Chomczuk might agree that that was hardly the most attractive thing to send to people to encourage them to switch.

We are talking about reaching out to people in rural areas. If companies spent less money on marketing, on putting bumf through doors, and on targeting people, might they have the money to deal with the one-offs?

10:00

**Callum Chomczuk:** Every organisation, every local authority and every commercial operator can always improve the way in which it identifies and targets people. I have spoken about the referral rates at different stages of the energy assistance package. A lot of work is going into that, and a lot of people are coming in. However, we may not be seeing as many positive referrals as we would like for income maximisation, for loft insulation and for boiler replacements, for example. All across the country, we can definitely do more to identify fuel-poor consumers—by which I do not mean just older people. Local authorities will clearly be a big partner in that.

I will pick up on a point that Norrie Kerr mentioned earlier. Imagine if someone knocked on your door and asked, “Do you want some insulation?” Personally, I would be very reluctant to engage with a stranger who had come to my door to offer me something. In such situations, people can be instantly mistrusting. However, if there had been marketing and campaigning—on the universal home insulation scheme, for example—in local papers and networks, then a door-knocking approach might help to build momentum within the community. If a consumer knew that their neighbour had taken advantage of a scheme, they might feel envious and say, “If my neighbour’s got it, then I should be entitled to it.” You might find that people were chasing each other up and competing to get all the schemes. At the doors, we could say, “You are entitled to free or subsidised loft insulation, but have you also considered all the income-maximisation approaches that you could take?”

Models exist, and the Government is pursuing them. The universal insulation scheme is only just beginning; over the next few years, I hope that it will reach many more households, and that it will help to tackle fuel poverty.

**Chic Brodie:** At the moment, 900,000 people are staring down the barrel of a gun. We cannot wait for a few years.

**Callum Chomczuk:** The challenge to abolish fuel poverty by 2016 has faced the Scottish Government and the previous Scottish Executive. The report of the Scottish fuel poverty forum in 2008 called for a step change in the funding to tackle fuel poverty, but we have not seen that from any Government or Executive. The budget for fuel poverty measures this year is around £49 million. Next year the figure will increase but, even by 2014, less money will be spent than was spent in 2010-11. At neither Scottish nor UK level are we seeing the necessary funding to tackle the 600,000 to 900,000 homes in fuel poverty.

**Chic Brodie:** May I ask one last question, convener?

**The Convener:** I will bring in Yvonne MacDermid first, on this particular issue.

**Yvonne MacDermid:** Local authorities provide both funding and money advice, and they are the trusted intermediaries. The 32 local authorities should have that built into all their strategies for financial inclusion. Co-ordination and linking up is required. At the minute, we have a postcode lottery for advice and access to schemes. Overcoming that will be a challenge, but it is doable.

The experience of our members in the current economic climate has been of a decline in the number of advice agencies and advisers available. A growth of debt advice in the private sector has helped to fill some of the gaps, but concerns remain.

Money advisers play a crucial part as trusted intermediaries. They are trained in giving advice on income maximisation and reducing costs—which of course includes advice on insulation. Any strategy will have to be done through local authorities; they are the ones that can truly make a difference at local level and, collectively, at national level.

**Chic Brodie:** Thank you for that. That is probably the most succinct response that I have heard on how we can tackle the problem.

I have a final question. Are we suffering because there are—please take this in the right way—too many organisations, some of which are very focused and some of which are dabbling? Some organisations in the private sector are certainly dabbling. Should the local authorities

take the lead in addressing the issue or should the fuel poverty forum do that? How can we get a simple, single channel through which the message will get to the people who are most affected?

**Mike Thornton:** You might think that I would say this, but there is a single channel. The key point is that, through the universal home insulation scheme and other initiatives, there are a lot of local authority schemes. Those schemes are determined by individual local authorities, so there is variation in provision. Also, as Yvonne MacDermid said, local authorities' provision of money advice, debt advice and fuel advice varies, and in straitened times it is likely that those services may be vulnerable in some areas. However, the current strategy is to have a national framework, the energy assistance package, and I emphasise the fact that that can refer to local schemes. If people are not aware of their local authority scheme but ring the national number, they will be referred to the local scheme if the offer is there. There are frequent referrals through the network to individual UHIS schemes and, as you would expect, we work closely with those.

Local authority and area-based approaches are probably the way forward, but they need a national framework. Any area-based scheme will run in a particular area at a particular time, and when it is not running in that area there will still be people in fuel poverty who need services. We need a national framework that they can key into and area-based, intensive schemes that can achieve economies of scale and intensity. As Callum Chomczuk said, such schemes can achieve psychological momentum when everybody knows that their neighbours are engaging and they do not want to be left behind. We can get high levels of participation because of that. For example, in the home insulation scheme in the Western Isles, on behalf of the Scottish Government we managed to deliver several thousand insulation jobs in a limited number of houses. Everybody on the island knew that the scheme was going on and, on occasion, as we drove past, they literally flagged down the vans to get us to come and survey their houses if they had not yet responded to our mailing. That combination of area-based, locally prominent schemes and a national framework is probably the correct strategy.

**Norman Kerr:** What we do not have just now is a national framework. Each local authority has its own local housing strategy. Indeed, we have been working with Scottish Government officials to influence those local housing strategies so that they will build in fuel poverty and energy efficiency measures. They are all set at different levels, depending on the authorities' other priorities. It is entirely right for local authorities to do that. However, Yvonne MacDermid made a very good point about it being a postcode lottery, as some

strategies are significantly more advanced than others. If we do not have a national framework for them to work to, that will continue.

I will give you an example. One of your parliamentary colleagues, Bob Doris, was on a warm homes visit with me about two years ago at this time of year. We visited a young family in Glasgow. The woman had three children, two of whom were under five, but had had no heating or hot water for four and a half years. The children had a range of special needs, and it was only when the family had a change of social worker that the social worker said, "I think there's maybe something we can do to get you a new boiler and heating system." They did a bit of research and found that that family was eligible for the Government's energy assistance package. Previous social workers did not have that information at their fingertips. Although it has no houses, as a local authority Glasgow has a fairly sophisticated local housing strategy and a fairly sophisticated response to dealing with residents' difficulties, but front-line staff were not aware of measures to support vulnerable households. That was a big issue for me.

We have got to look closely at whether there is a national framework and, if we do have a national framework, how we cascade it down to the person on the front line so that when they are working with vulnerable households they are able to deliver against it.

**Mike MacKenzie (Highlands and Islands) (SNP):** Norman Kerr will remember that he and I were at a meeting on fuel poverty a few weeks ago. A lady attending the meeting asked for advice. She described that she lived on the island of Arran, in a pretty typical house—a storey and a half, no accessible loft, stone walls and no cavity. Obviously, mains gas was not available to her, and the fuels that were available cost much more than on the mainland. Norrie Kerr gave her what was probably quite astute advice, although it was advice that I thought was rather unfortunate.

**Norman Kerr:** I do not think that she would have taken it.

**Mike MacKenzie:** I am sure that she would not.

**The Convener:** We are all agog to know what the advice was.

**Mike MacKenzie:** I am building the drama here, convener. Norrie Kerr's advice was that she should move house.

There is a preponderance of that type of housing in rural areas, particularly in the islands. On many islands, fuel poverty is not 30 per cent but 40 or 50 per cent. Do panel members feel that the current range of interventions is at all useful in tackling fuel poverty in rural areas?

The other concern is hard-to-heat properties throughout Scotland, which have been estimated at about 30 per cent. How should we tackle that issue? In some properties we are undertaking the current range of interventions, but are any of you aware of the U-value of 50mm of polystyrene or polyurethane insulation? I think that we would all agree that we will continue to face quite steeply rising energy prices. If 50mm of cavity insulation takes you out of fuel poverty now, will it take you out of fuel poverty as energy prices rise? What do we do next?

**Norman Kerr:** There is a lot in what Mr MacKenzie says. The current measures were designed back in the early 1990s as a quick fix. Loft insulation was a no-brainer. Cavity wall insulation was a wee bit further down the road because it addresses the fabric of the building. However, we do not have measures that are readily available or built into large-scale programmes such as CERT and CESP. There is certainly room for measures such as external wall insulation or internal wall insulation to be built into programmes such as CESP, but they would be a small proportion of what CESP does. Those measures are not replicated on a large scale.

There is an opportunity for the Scottish Government's energy assistance package to include solid wall insulation, but it is very much a last resort because it can be very expensive. We do not have a range of measures to address the 30 per cent of homes that you speak about.

You asked what we should do when we have made the houses as energy efficient as we can. There are a number of other things that we need to do. If we use the standard assessment procedure as a measure, once we take a house to a SAP of 100, it will be about the space and water heating, the lighting and some appliances. If the heating cost can be pushed down as far as possible by insulation, then alternative heating sources can be considered. One of the things that we have not properly addressed—Arran may well be an area where this could be done—is whether it would be possible to have a district heating scheme that is run off biomass or another fuel that is not necessarily mains gas.

10:15

As well as looking at the insulation of the property, we need to look at other measures. Mike Thornton spoke earlier about benefit entitlement checks. I know that many of you around the table will tell me that there is not much that the Scottish Government can do to increase people's income levels, but we can do a lot to ensure that people are aware of their entitlement to benefits. The Scottish Government could suggest tomorrow to its managing agents for the energy assistance

package that every contractor that it employs must pay a living wage—that is, a minimum of £7.28 an hour. That could be stipulated tomorrow and it would massively increase the wages of people who work in particular programmes. It would make the programme more expensive, but I think that we need to accept such an additional cost.

We need to turn more of our attention to what the heating sources of the future will be. As Mr MacKenzie rightly said, given the current structure for gas and electricity, prices will only increase. We need to find more innovative ways. I am sure that I have mentioned to this committee before that the local authority in Aberdeen has addressed the problem of its expensive and hard-to-treat large tower blocks by putting in a combined heat and power plant that exports electricity to the grid but has a by-product of hot water that goes into the multistorey flats around Aberdeen to provide a much more affordable warmth solution. People are getting their space and water heating at a much more affordable price, which should be the focus.

There will come a point at which we have made our homes as energy efficient as we can. The latest house condition survey from the Scottish Government was produced in November and it showed that we have again raised the level of energy efficiency within our homes to over seven on a scale of zero to 10. We are moving that level much further up, but we need to turn our attention to not just insulation, but heating sources. That is definitely something for the future, but I suggest that it must be the not-too-distant future.

**Mike Thornton:** I will pick up on some of Norman Kerr's points. Looking to the future, the energy company obligation that will come in towards the end of next year includes specific provision for solid-wall insulation. That might provide the householder in Arran with more options that are not available under the current arrangement, as Norman Kerr said. There is some advance up the hierarchy of more expensive but more useful insulation for the hard-to-treat homes, which are one of the big problems.

One of the issues for Scotland is to ensure that the take-up of the energy company obligation in Scotland is as high as it can be. Obviously, it is a UK scheme, so it is important to ensure that the fuel companies deliver at least a pro rata portion of that investment in Scotland. We should perhaps even think about taking a more positive attitude than that and ask why we cannot go above pro rata, not least because, as I think that Norman Kerr said, the value of carbon to the fuel companies in the scheme will be higher in Scotland. I hope that there will be a way of drawing additional investment into Scotland, using that as the lever.

Future proofing against fuel poverty through energy efficiency and using sustainable energy in the home is about how much the efficiency of the home can be improved and what happens to fuel prices. If we make the not-unreasonable assumption that fuel prices will continue to rise steeply, we must conclude that drastic reductions in energy bills will be needed to future-proof against such price rises. That is possible. It is possible to produce homes that have heating bills of under £100 a year. There are standards for such homes, which have been built in fairly large numbers on the continent and are beginning to be built in Scotland.

Of course, those are new homes; retrofitting existing homes is a challenge. It is not technically impossible, but it is expensive to bring existing homes up to the standards that I am talking about. I guess that ultimately that is the direction that we need to go in, because if we can bring people's fuel use down to such a low level, even a steep rise in the cost of the small amount of fuel that they use will not equate to too much cash.

**Mike MacKenzie:** I absolutely agree with you. Can you give an estimate of what it would cost to bring the housing stock up to modern standards of insulation—let us say the equivalent of 200mm of fibreglass or similar quality insulation in the walls, 300mm in the roof and maybe 150 to 200mm under the floor? Let us say that we have about 2.5 million houses, of which 90 per cent are below current standards. Give me a rough, back-of-a-fag-packet estimate of the cost of retrofitting the housing stock.

**Mike Thornton:** Is this the point at which I say that I do not smoke?

I can say straight away that it would be expensive. We would be looking at thousands of pounds per dwelling. Norrie Kerr has some ballpark figures, because Energy Action Scotland commissioned a study on the issue.

**Norman Kerr:** According to figures that we produced in 2006, to bring every home in Scotland up to an NHER of 7 would cost £1.7 billion. Time has moved on and we are probably looking for houses to have an NHER of 8, so we could reasonably say that the cost would be £2 billion. However, that is not factoring in either economies of scale or other fabric repairs. You talked about putting insulation between the inner and outer leaves of the building. Sometimes the outer fabric of a building is not suitable to take the internal works.

The statisticians at the Scottish house condition survey will give you a detailed analysis of the cost of disrepair in houses in Scotland and the cost of bringing every house up to an NHER of 8, 9 or 10. Those figures—and they are not back-of-a-fag-

packet figures—will be available to the committee if it requests them from the survey team.

**The Convener:** For the benefit of the official report, it might help if you told us what NHER stands for.

**Norman Kerr:** I apologise to the reporter. It stands for national home energy rating. The NHER scheme is equivalent to the Government-backed standard assessment procedure. SAP software is used by home builders and others to calculate a home's energy efficiency—it is a computer-based programme. NHER is a commercially available software package, which the Scottish house condition survey team uses because it takes account of climatic conditions. The SAP programme does not take account of climate; it is based on a model of a house in Sheffield or Nottingham and assumes that every house of that type will have the same energy demand, irrespective of where it is in the United Kingdom. NHER is more site specific.

We may also have used the phrase RDSAP, which is reduced data SAP. On the programmes that come into being next year, Mike Thornton alluded to the fact that the green deal and the energy company obligation will give a better carbon score for Scotland. Those programmes will use reduced data SAP as their calculation model, but there will be an element built in to allow for the Scottish climate.

I apologise for talking gobbledegook.

**The Convener:** Thank you.

**Mike MacKenzie:** Convener, I ask first that the committee look at getting that information. Would Norman Kerr also give us some written information with regard to his own calculation?

**Norman Kerr:** Sure.

**Mike MacKenzie:** I am concerned that the cost of what we are talking about—bringing all of the housing stock up to current standards—is understated.

**Norman Kerr:** We need to recognise that there will be some housing stock that we will not be able economically to bring up to current standards. We only need to walk 100yd from here to see that, particularly if we are talking to Historic Scotland or others about the intrusive work that would be needed for insulation measures in certain homes. That is why I am suggesting that we need to consider alternative heating solutions for such homes that provide more affordable heating rather than a higher level of insulation.

**The Convener:** It would be helpful if you could give us that information, Mr Kerr. The issue is not just one of fuel poverty; the other relevant issue is

the amount of carbon emissions we would save if we made the investment.

**Norman Kerr:** I suggest to the committee that, perhaps at a future evidence session, the Scottish house condition survey team would be a mine of information. That team provides the information to the cabinet secretary and his officials that is used in the modelling for what needs to be done in rural and urban areas. It has information on a range of things. It can provide further information on its reports, the most recent of which came out in November.

**The Convener:** Thank you.

**Mike MacKenzie:** Do you agree that the delay in and uncertainty over the renewable heat incentive are unhelpful to us in designing programmes to take advantage of that UK scheme and are causing difficulty for installers, housing associations and all who would wish to take up the opportunity?

**Norman Kerr:** There will be an element of difficulty as not all housing associations will be in the position to tap into the renewable heat incentive—it is a matter of the technology that they would like to apply—but any uncertainty is unhelpful at this time.

**Mike MacKenzie:** Do you therefore agree that the recent announcement on feed-in tariffs for solar photovoltaic panels is disappointing, especially considering the disproportionately small take-up of solar PV feed-in tariffs in Scotland?

**Norman Kerr:** The feed-in tariff—the money that goes to the individual consumer—is factored into everybody's bill. If we continued to expand the feed-in tariff take-up at the same rate, it would have a significant impact on the energy bills of everybody around this table.

The feed-in tariff was always due to be reviewed as the cost of the technology reduced. If, for example, solar panels were at £14,000 two years ago, the cost of the technology should have fallen over time. It is therefore appropriate that the return on the investment to the individual should mirror the reduction in capital cost. There is some discussion to be had about the manner in which the Westminster Government undertook the review and reduced the tariff, but it was always to be expected. It has come in more quickly than many people hoped it would, but it was always going to happen.

10:30

**Mike MacKenzie:** I apologise to the convener for going on, but are you concerned—

**The Convener:** We are a little short of time.

**Mike MacKenzie:** I will leave it there, then. I might put my question to other witnesses later.

**The Convener:** Thank you. I am conscious that three members are keen to ask questions and we are a little short of time.

**Stuart McMillan (West Scotland) (SNP):** Good morning. I would like to follow up a couple of points that were touched on earlier. Callum Chomczuk talked about the different schemes and said that, if some people find out what their neighbours have managed to get, they will chase it. That is welcome, but it creates issues as well, because households do not all have the same income. Constituents have contacted me in the past four and a half years to say, "Wee Jeanie down the road got a boiler system. Why can't I get one?" There are challenges in trying to get the message across about individuals' entitlements under the schemes, which are based on household incomes.

**Callum Chomczuk:** Yes. Although we are looking forward to state funding to part-fund the schemes, there will always have to be a contribution from householders that depends on their income. As Mike Thornton said, the energy assistance package has four levels of advice and there is a chance that only the lowest, most basic level of energy advice will be applicable. I might not be eligible for stage 4 of the scheme. However, I know that my parents-in-law would be eligible. Even if I recognise that I cannot benefit from the maximum level, we can do some door knocking and build momentum in communities to spread the word.

Although someone might feel some jealousy, for want of a better word, that their next-door neighbour got something that they did not, we can all think of people in our families or social circles who could benefit heavily from the more detailed and more expensive schemes. That is where the UHIS project has a real advantage. If we do the door knocking that I mentioned community by community, we can help to tackle fuel poverty and reduce carbon emissions. However, I concede that there will be barriers and that some people will be upset to learn that they are not entitled to all the measures that their neighbours receive.

**Stuart McMillan:** My experience suggests that, with the change that was made with the introduction of the energy assistance package, there is now a bit more understanding of how the scheme operates. Previously, more people got a new boiler system installed even if the system that they had was not broken. That is now a key element of stage 4.

**Callum Chomczuk:** We do not want to raise expectations too much. As Mike Thornton said, only 40 per cent of referrals to the energy

assistance package for insulation at stage 3 are successful, so 60 per cent are unsuccessful. We cannot go to people's doors, say that we are from the Energy Saving Trust, Age Scotland or whatever and suggest that we are there to give them a brand new boiler and cavity insulation. That would misrepresent the reality. However, by explaining exactly what the landscape is, what is offered and what the householder contribution would be, we can start to tackle the problem in a much more effective way. That is better than taking a reactive approach and hoping that people who are fuel poor will phone in and self-refer.

**Stuart McMillan:** Norman Kerr touched on the cost of carbon and said that energy companies do not want to go into areas with hard-to-treat houses because of the cost of improving them. Earlier, we heard about the idea of having some kind of intermediary to work alongside energy companies, housing associations and so on. Would your organisation offer that facility to the energy companies? To take a hypothetical situation, if a couple of companies told you that they had been contacted by a couple of people in an area and they wanted to go in, but they did not heat enough homes in that area for it to be economically viable to do so, could you act as an intermediary and go to the other companies to say, "We have been contacted by companies, and we are willing to facilitate your entry into the area, so that there can be economies of scale"?

**Norman Kerr:** Over a number of years, a range of small insulation companies have run into difficulties. For example, Fraserburgh Community Business had a company called Buchan Insulation. It has closed its doors in the past few months because there has not been enough work to keep it going. Companies have had problems getting the volume of work that they need to sustain themselves. All the energy companies will have two or three very large contracting companies that they work with. They are very successful and will drive large volumes of work for the companies. However, we are not seeing the same volume of work in the rural areas. We are certainly not set up to offer that, but there is a range of small insulation companies that are in a good position in that regard. A small insulation company in the Western Isles, Tighean Innse Gall, has been operating for many years and is of a size that allows it to take a smaller volume of work. We need to think about how we can support smaller businesses. I know that the cabinet secretary is interested in how we can use small businesses in remote areas to do the one-off jobs that we are talking about. However, we need to ensure that that is viable both for them and for the energy company.

**Stuart McMillan:** Earlier, we heard about people not continuing to interact after the first point

of contact. If an individual has been contacted and has tried to access some help and assistance but has been rejected, they might be demotivated and feel that there is no point trying again, because they are only going to be told that they do not qualify. That might be the case with senior citizens who are living on a small pension that might put them above a certain threshold.

**Callum Chomczuk:** Friends and families of older people who are potentially subject to fuel poverty have a responsibility in that regard. The universal home insulation scheme involves an appropriate sort of door-to-door and community-to-community engagement, whereby people speak to residents to explain what the package could offer them. It does not raise people's expectations unnecessarily, which we spoke about earlier. By going through a proper assessment of people's energy needs, the scheme can give a good idea of what they might be entitled to. I agree that the last thing that we should do is overpromise on what the packages might deliver for older people. If we do that, people will disengage from other programmes, regardless of whether they might benefit from them.

**Stuart McMillan:** I have one final point. The landscape is fairly cluttered, as Chic Brodie said. Given that there are numerous schemes and acronyms, many of which have been mentioned, it is understandable that members of the public might switch off once they have heard about three or four of them. Given that there are different schemes coming in all the time, it is vital that work is done on trusted intermediaries. I take Mike Thornton's point that the public do not need to fully understand all the schemes that are in operation if there is one place for them to go where there are people who have all the information. That is an important issue to work on. Norman Kerr sent out a strong message on the framework, which I have certainly heard, and I hope that others have, too.

**Mike Thornton:** You are absolutely right. This goes back to something that Callum Chomczuk said—we need to think about what the interaction with the client is. It has to be a discussion with the client, which is quite a lengthy interaction. A typical phone call to the network lasts for more than 20 minutes, because it cannot be a scripted conversation or a tick-box, no-no-yes-yes-goodbye conversation. It has to be a conversation about the person's circumstances. They have to be drawn into the process and talked through what they might be eligible for. That is the approach that is taken with the area-based schemes and nationally, and it is one of the keys to overcoming some of the psychological barriers that exist. I think that it assists if people feel that the person they are talking to is engaging with them to offer advice, rather than being just another contact, is having a conversation that looks into their

circumstances and is talking to them on the basis that they are there to help.

**John Wilson (Central Scotland) (SNP):** I would like to start by getting a clear idea of how many people we expect to be in fuel poverty by the end of this year. In his opening statement, Mike Thornton used a figure of 600,000 people. Norrie Kerr referred to the cabinet secretary's statement, in which he said that he expected 900,000 people to be in fuel poverty by the end of this year. Can we get a clear idea of how many people we expect to be in fuel poverty this time next month?

**Norman Kerr:** The official figure—the figure that is calculated by the statisticians—can be found in the Scottish house condition survey, but it always trails behind the current figure. In reaching the figure of 900,000, I think that the cabinet secretary looked at the calculation that is used by the Scottish house condition survey team, which says that for every percentage point increase in fuel prices, there will be a rise of so many thousand in the number of households in Scotland that are in fuel poverty. That is the calculation that I think the cabinet secretary and his officials did to get the figure of 900,000. The figure that Mike Thornton cited, which is from the Scottish house condition survey, trails behind the current figure, which is 900,000.

**Mike Thornton:** Being a data-orientated person, I was quoting from the most recent data available, but I fully agree with Norrie that it is possible to make a projection to the present year and that the present figure is likely to be higher.

**John Wilson:** There is a time lag.

**Mike Thornton:** Yes.

**John Wilson:** Thank you for that. I just wanted us to be clear about the figures that we are working to, which become crucial as we try to address fuel poverty. They depend on what measure we use to define fuel poverty. The current definition is that people who spend more than 10 per cent of their disposable income on energy costs are in fuel poverty, but the UK Government has commissioned the Hills review to look at that definition.

Where is the debate on redefining the measure of fuel poverty going, particularly given Norman Kerr's comment that, with regard to energy costs, the UK Government bases its approach on conditions for a house in Sheffield, not a house in Inverness or Thurso?

10:45

**Norman Kerr:** We need to look at what we are doing in Scotland, where the definition is based not on disposable income but on all income before

housing costs. Some time ago, the Government said that it would report against both definitions—in other words, against disposable income and total household income. The 900,000 figure that I have given the committee is based on total income, which includes mortgage interest relief, school meals and other things.

The Hills review is trying to understand more clearly the depth of fuel poverty, which, in Scotland, we have continued to measure through the Scottish house condition survey. By depth of fuel poverty, I mean the various bandings. The marginal fuel poor spend between 8 and 10 per cent of their income on fuel; those in fuel poverty 10 per cent; those in moderate fuel poverty between 12 and 18 per cent; and those in extreme fuel poverty more than 20 per cent. I am sorry to keep going on about the Scottish house condition survey, but the latest figures, which were provided to the Scottish fuel poverty forum yesterday, show that, although the energy efficiency of our homes is increasing and the depth of fuel poverty is shrinking, we still have a fairly significant core of people in extreme fuel poverty.

Professor Hills is trying to understand the depth of fuel poverty, but his question whether the definition is still fit for purpose still needs to be examined by the Westminster Government. Energy Action Scotland feels that, when the definition was formulated, expenditure on fuel accounted for 3 to 4 per cent of household income, so those spending 10 per cent were actually spending double the expected average. Given that, despite fuel price increases over the past couple of years, people are on average still spending about 5 or 6 per cent of their income on fuel, we believe that the current definition still stands.

Professor Hills's take on this is to see whether something can be done to factor out the vagaries of rising fuel prices, but he is also ignoring the effect of climatic conditions. In Scotland, we work with the same 10 per cent definition but set our heating regime at a different level. In England, heating for all households is set at 18° for the main living area with a 3° difference in the rest of the house; in Scotland, the temperature for our vulnerable households is set at 23° in the main living area and 20° in the rest of the house. That is where our fuel poverty measurement comes in. The English house condition survey uses the 10 per cent definition, but it is linked to a different heating regime from that in Scotland. Indeed, one reason why Scotland has proportionately more fuel poor households is that we are measuring to a higher heating regime for a longer time. That is entirely right if we are looking at the health impacts of fuel poverty.

One interesting thing in Professor Hills's report is his take on the Marmot review, which examined health and housing. The Marmot report found that a certain number of excess winter deaths are caused by respiratory illness, heart attacks and strokes as a result of people living in cold and damp homes. Professor Hills said that, if the actual figure was even 10 per cent of that, that would still be greater than the number of deaths that are caused by road traffic accidents in England. That is an important point.

When we consider the definition, we can look at the heating regime, the period of time that is taken into account and whether we use disposable income or total income but, given that we are in an area where the average fuel bill is about 4 or 5 per cent of income, I see no reason why we should adjust the 10 per cent figure that is used in the definition of fuel poverty.

**The Convener:** I will let Yvonne MacDermid in, as she has not said anything for a while.

**Yvonne MacDermid:** On the percentages, the welfare reform that is in the pipeline will have a catastrophic effect on people who are already in debt, because many of them will not receive the benefits that they currently receive. I understand where all the current figures have come from, but we need to future proof the figures, given that an awful lot more people will be in the bracket of being fuel poor. I just want to flag that up to the committee. The welfare reform is not here yet, but projections show that, when it comes, it will have a huge impact. I predict that it will put more people into poverty and it will certainly result in more people having debt problems.

**Callum Chomczuk:** I echo much of what Norrie Kerr said. The heart of the Hills review is the suggestion that the definition of fuel poverty is too sensitive to price increases. It is absolutely appropriate to re-examine the definition because the 10 per cent figure has been used for some time, but fuel prices are absolutely the biggest driver of fuel poverty among older people. Scottish Government research suggests that a 5 per cent increase in fuel prices pushes 46,000 more households into fuel poverty. That affects all types of household, but particularly older people. Age Scotland would have big concerns about moving to a definition that did not reflect the fact that price has the single biggest impact on fuel poverty.

**John Wilson:** Yvonne MacDermid talked about the welfare reform that is coming and the potential cuts in household incomes for those who are on benefits, but we also face a situation in which pay has almost stagnated and fuel prices are increasing. There is an impact on the elderly, because their pensions are almost bouncing along on the same level, while fuel prices continue to

rise. Does the panel agree that that will have a bigger impact on fuel poverty?

The Hills review said that we should take the fluctuation in energy costs out of the equation but, to refer to Norman Kerr's comment about climatic changes, this time last year, we had temperatures of -19°, not just in the Highlands, but in the central belt. At the same time, south of the border—in Sheffield, for example—it was freezing or just above freezing. Surely that must be taken into account when we consider the impact of fuel poverty in Scotland, particularly in rural areas. In Scotland, we face colder, longer and damper winters than those south of the border. A UK measure does not take account of the impact of climatic changes in Scotland.

**Norman Kerr:** I think that I understand where you are coming from, but, if we assume that there is a national definition of poverty, any national definition of fuel poverty will, by the nature of its measurement, give Scotland more fuel-poor households. This is about our response to those who are living in fuel poverty, and about how we react to them. Mr MacKenzie made a point earlier about a lady in Arran. Mike Thornton has already picked up the point that, at the moment, our response to that lady would be to give her advice, whereas under the new proposals it will be to direct her towards the green deal, whereby she might be able to access funding, without incurring any up-front cost, that would impact on the energy efficiency of her home. If anyone who is on benefit and unable to provide the capital cost approaches the Government's energy assistance package, we will react to that and provide them with that funding.

The cabinet secretary asked the fuel poverty forum to look carefully at our strategy and our responses to people who are living in fuel poverty. A lot of this is about choice. Those who are vulnerable and those on the lowest incomes do not necessarily have a choice about where they stay, what type of heating they have or what improvements they will make to their homes. That is where the Government has an opportunity to intervene and offer them that assistance. When people have a choice, we can enable them to make those choices by giving them the information that they need in order to do so. For example, replacing someone's old, inefficient heating system with a new, more efficient microrenewables system is possibly more capital intensive, but it will give them a better return on their money. Alternatively, we could encourage them to take out a low-cost loan to provide a significant amount of insulation in their building.

We have the definition, and in Scotland it reflects the climatic conditions. As I said, that results in our having a higher percentage of fuel-

poor households than England. Interestingly, the University of Ulster conducted a review of the strategy and the definition used in Northern Ireland and suggested that Northern Ireland should adopt the Scottish heating regime because of its health benefits. It is being suggested that, rather than following the English definition as it does now, Northern Ireland should adopt the Scottish regime because it would give a truer picture, as well as helping to increase health benefits.

**John Wilson:** Before I go on to my final question, I just want to put on record my surprise and concern at Norman Kerr's earlier example of a family living without any hot water. Any council department that does not pick up on such situations in this day and age should be ashamed of itself. Those departments should ensure that no one, and especially not anyone with a young family, lives in housing that falls below tolerable standards. A house without hot water falls below those standards.

What are the panel's views on the measures in the chancellor's autumn statement that relate to fuel poverty?

**The Convener:** Nobody is immediately jumping up to answer that question. I appreciate that the statement was made only yesterday, so it is perhaps a little unfair to ask you for an immediate response to it.

**Norman Kerr:** It will need careful consideration. I will need to sit down with my colleagues and study it in greater depth, but I would be happy to share the outcome of that with Mr Wilson.

**The Convener:** That would be helpful. Angus MacDonald, have your questions already been covered by others?

**Angus MacDonald (Falkirk East) (SNP):** Much of what I was going to ask has been covered, especially in Mike MacKenzie's questions and Norrie Kerr's answers. As we have heard, there is a high degree of fuel poverty in rural areas, with 40 per cent of households in the Western Isles being hit, even with insulation companies such as Tighean Innse Gall operating at capacity. Other areas of western Scotland and the Orkney Islands are also affected.

It has been suggested that, if we are to reach the target of eradicating fuel poverty, more attention must be given to those who are off the mains gas network—the figure is around 35 per cent in Scotland. We have heard the panel's views on what could be done to help those in traditionally built houses, but I would be interested to hear what can be done to help those in fuel poverty who use heating oil and liquid petroleum gas. The Scottish Government has direct control over only one of the key factors that determine fuel poverty—the energy efficiency of the home.

11:00

Over and above that, we see from Calor Scotland's written submission that there are issues with the CESP criteria, which unfairly disadvantage rural areas. Furthermore, the Scottish Government's data zones do not seem to take into account the dispersed nature of rural communities or the fact that isolated areas of deprivation are averaged out by small incidences of affluence. Does the panel feel that it would be helpful for the Scottish Government to review the data zones? Would that be a step in the right direction in assisting communities and individuals in rural areas?

**Norman Kerr:** The next panel may be able to shed more light on that. The index of multiple deprivation was used for CESP because it was a national, Great Britain-wide programme. Energy Action Scotland and others noted that the difficulty for Scotland was that—as Mr MacDonald said—rural areas would be disadvantaged because of pockets of affluence; however, that fell on deaf ears and we are where we are with CESP. Given that it finishes next year, reviewing the data sets would be like bolting the stable door after the horse has gone, but in any future programmes that the Scottish Government designs, we must take into account the issues of the index of multiple deprivation as opposed to the data sets that we already have, and build around that.

I do not think that we need to make any changes to the data sets at the moment, but we must be mindful of them should we design further programmes. That might mean an extension to the universal home insulation scheme, which we have talked about and to which type of programme the cabinet secretary has said that he is committed to providing funding for the next three years. When we design the delivery of those programmes, we must take into account the points that Mr MacDonald has just raised.

**The Convener:** Do you want to add anything, Mr Thornton?

**Mike Thornton:** No. Norrie Kerr has covered all the points that I would have made. I agree with him.

**The Convener:** Thank you very much. I appreciate that it has been a long session. I thank all our witnesses for coming and for their evidence. We will have a short suspension to allow a changeover of witnesses.

11:03

*Meeting suspended.*

11:09

*On resuming—*

**The Convener:** We are a bit behind the clock, and I apologise to the second panel of witnesses for keeping them waiting. We have representatives on the panel from local authorities and energy companies. We do not intend—if we can help it—to revisit the evidence session on energy prices that we held in June, so it would be helpful if members could avoid pursuing that matter in depth. We are here to consider fuel poverty and the action that is being taken to try to address it.

I invite the panel members to introduce themselves.

**Lindsey Restrict (Scottish and Southern Energy):** I work for Scottish and Southern Energy. I am a CERT and CESP project manager, so I work specifically on the energy efficiency programmes and the delivery thereof in order for us to meet our targets.

**Rupert Steele (Scottish Power):** I am director of regulation for Scottish Power.

**Kevin Christie (Aberdeen City Council):** I am a senior domestic energy officer with Aberdeen City Council.

**Eddie Boyd (Highland Council):** I am the principal engineer at Highland Council. I deal with energy matters and support our housing colleagues in delivery.

**Kevin Roxburgh (Scottish Gas):** I am the managing director of Scottish Gas.

**The Convener:** Thank you for joining us. When the committee took evidence on the Scottish Government's budget, one of the issues that arose was the fact that it was difficult to obtain data on how much the energy companies spend under CERT. Given the importance of such programmes, can the energy company representatives tell us exactly what their input is in that regard? You heard some of the earlier evidence session, in which we heard how significant such programmes are in addressing fuel poverty.

**Rupert Steele:** People tend to look at the programmes in terms of their estimated cost, which the Government set out in the impact assessments that led to the programmes being put in place. Broadly, it involves adding something like £25 to £30 per fuel bill. From that, it can be worked out that the cost of the programmes amounts to several billion pounds. Obviously, the energy companies, as part of competition, try to deliver the programmes more cheaply, which is an incentive that drives us to be more efficient. The macro picture is that the programmes are very large and spending on them is substantial.

**Kevin Roxburgh:** I agree. The spend creates about £25 to £30 on the consumer's bill. Scottish Gas spends in Scotland about 9 per cent of the UK spend on CERT, which is equitable across our customer base. Our comparable spend on CESP is about 27 per cent, so we see a far bigger concentration of CESP spend in Scotland from British Gas on behalf of Scottish Gas.

**Lindsey Restrict:** I echo my energy colleagues' points. For SSE, our CERT spend is roughly 10 per cent, and more than 25 per cent of our CESP projects are based in Scotland.

**Chic Brodie:** On that last point, I have a question for Lindsey Restrict and Kevin Roxburgh. I know how much you spend in comparison with down south. However, how does the take-up of schemes compare with what you believe to be the demand? I understand that there might have been difficulty in some cases in finding out who the actual clients might be.

**Lindsey Restrict:** Without wanting to repeat what has probably already been said—we heard a snippet of the earlier evidence—there are a number of barriers and there are concerns about whether we are reaching the right people. A number of schemes exist and there is a bewildering choice for customers. I hope that it comes as no surprise to any of my colleagues when I say that we are finding it more difficult to reach the low-hanging fruit. A Scottish housing quality standard report said that the figure for virgin lofts is now only 3 per cent.

**Chic Brodie:** What are you doing to overcome the barriers? As an energy company, how proactive are you in finding the client base?

11:15

**Lindsey Restrict:** As an energy company, we recognise that we need a co-ordinated approach. We welcomed initiatives such as the universal home insulation scheme, which puts the onus on local authorities and delivery partners to know where there is a need for works to be done. We very much welcomed that partnership approach. We welcome any help or opportunities that enable us to work with the Scottish Government or other partner organisations to ensure that we can reach the people who have unfilled cavities or lofts that need to be done.

**Chic Brodie:** Given the resources that you have, I would have thought that you would not need such help and that you could be proactive in finding those people. How engaged are you with local authorities in finding the client base and in proactively ensuring that we optimise insulation and minimise fuel poverty?

**Lindsey Restrict:** There are challenges for local authorities in identifying housing stock. There have been changes in the home energy efficiency database, which contains a lot of records that authorities can access to identify pockets of uninsulated properties.

We engage with local authorities and we try to help them to understand how we can support them if they are embarking on a programme of work.

**Chic Brodie:** Earlier in the meeting, we heard about problems in finding clients. Norrie Kerr talked about the difficulties. Perhaps the council representatives will comment. Social work departments must have some means of capturing information about pockets of fuel poverty or individuals who are fuel poor. What engagement do councils have with the fuel companies? How do you find the problem clients?

**Kevin Christie:** It can be difficult to identify individual households, but we can identify areas. We have our housing database and we use the Scottish index of multiple deprivation. HEED is not that great, because it is a new database and there are not many properties on it—

**The Convener:** Hang on a second. For the benefit of the official report, let me say that although I know that some people here are comfortable and familiar with acronyms, it is not always particularly helpful to use them.

**Kevin Christie:** HEED is the home energy efficiency database, which the Scottish Government introduced. In years to come it will probably be a useful tool, but currently it shows where measures have been applied and not where they have not been applied. It is one tool that can be used in trying to determine where the fuel poverty is.

I am fortunate in that, 12 years ago, a database was developed of all 96,000 houses in Aberdeen. We update the database yearly, when we get the information, and we now have 106,000 houses on the database. In the private sector, much of the information is based on self-completion, so we cannot rely on it. For our housing, the information is much more accurate because it is provided by people who have done national home energy rating assessments over the years.

We know what we have in our properties, but the private sector is a difficulty. We can guess at the situation. What we can do, and what we did when we were identifying UHIS areas, is use SIMD information and the local knowledge of staff who work on the ground. Social work has figures for people who are over 60 and on benefits. However, all that information does not necessarily show us where the fuel poverty is, although it gives indicators; we choose an area, based on all the information.

**Chic Brodie:** So there is no real targeting.

**Kevin Christie:** There is targeting. For more than the past 10 years, we have taken an area-based approach, going round every area. There is fuel poverty in every area; to assume that fuel poverty is only here but not there would be wrong. As a duty to our tenants and to everyone in the city, we have to take a city-wide approach and tackle every area. We take a double approach: our area-based scheme has been running for 12 years now, and a city-wide scheme runs at the same time.

**Chic Brodie:** In the previous evidence session, we heard about the proliferation of people trying to penetrate the market, and it was suggested that a national housing framework was needed. Last year in Scotland, domestic gas usage declined by 19 per cent, but the figures were different in different councils. I have heard what has been said about targeting and what have you, but are there discussions among councils on best practice? Is there any homogeneity of approach in sharing problems, or successes, in overcoming fuel poverty in certain areas?

**Eddie Boyd:** A number of key groups are linked. In Highland Council, we reach out to registered social landlords and other councils, and we share what we are doing. That is beneficial, because we do not want to repeat mistakes that we or others may have made. We want to learn together and move forward together. Another benefit is that programmes can be shared. Work and opportunities can be combined in order to have a wider impact.

We have had problems with HEED. Our area is sparse, so the information is not all that accurate. We have had problems in some of our programmes, finding that work had already been done that we thought had not been done. We might have thought that there were more virgin lofts in our area than there actually are. I am sure that similar things happen in other parts of the country.

**Chic Brodie:** Before I ask my final question, I note that I declared an interest earlier. We have been talking about the impact of energy efficiency measures on domestic users, or the end clients, but what connections do you have with companies and businesses to help them with energy efficiency? If companies could be more energy efficient, thereby reducing their costs substantially, it might lead to higher incomes for individuals and therefore less fuel poverty. Despite increasing fuel prices, people might be able to afford the fuel that they need.

**The Convener:** That question had a slightly tortuous link to fuel poverty.

**Chic Brodie:** But I think that I have proved the link, convener.

**The Convener:** It was a fair question to ask but, in considering commercial enterprises, it moved slightly away from the scope of our inquiry.

**Chic Brodie:** If my suggestion freed up income, it would take people out of fuel poverty.

**Kevin Christie:** Locally, we funded an energy advice centre to fill gaps in provision, but now there are the Government energy saving Scotland advice centres, with a business adviser. We have therefore withdrawn and do not provide that service any more. The link is through the Scottish Government's network of energy saving Scotland advice centres. It could be argued that, if another person was doing that too, they could get round more businesses. However, I would not win that argument with our finance department.

**Eddie Boyd:** We have worked with businesses on, for example, small microrenewables projects. We have also worked with Inverness College, for example, to offer opportunities and training to businesses. That should stimulate the market and economy in the Highlands.

**Kevin Roxburgh:** I am no expert on the business-to-business side, but as a supplier I know that Scottish Gas and British Gas have installed many smart meters in commercial premises to allow businesses to manage their energy consumption more efficiently.

**Chic Brodie:** Those meters do not reduce usage; they just tell people how much they are using.

**Kevin Roxburgh:** They give people knowledge and insight, which allows them to make choices and take steps towards being more energy efficient.

We have set up our green skills academies and we are happy to take the local workforce and skill them up in new technologies such as microgeneration and biomass. They are operating in Dumfries and Galloway and now in Aberdeen. Scottish Gas is trying to help in various ways, but our main approach to the commercial market is around the deployment of smart meters and giving the customer the intelligence and insight to manage their energy consumption in a more energy efficient way.

**Rupert Steele:** Different types of commercial customer have different approaches. There is a class of commercial customer that uses a great deal of energy, and optimising their usage is an important part of the economics of their business. Typically, they have energy managers whose job is to mitigate and optimise energy costs and consumption. In other businesses, energy competes with other issues for management

attention and decisions are taken about how to prioritise them.

**Lindsey Restrict:** My remit is in the domestic energy efficiency market, but I know that Scottish and Southern Energy has recently been involved with a social enterprise in a small initiative to provide energy efficiency advice to businesses. We work with organisations to improve their energy efficiency. I do not have any figures or specific information on whether the savings are passed on to their employees or what have you, so I cannot comment on that.

**Chic Brodie:** Thank you. It is an important point. If we can help businesses to reduce their costs, the money that was freed up could be directed to people's incomes and therefore take some heat—if I can use that word—out of the fuel poverty spectrum.

**Stuart McMillan:** Good morning, panel. Chic Brodie touched on a potential framework, which was discussed in some detail earlier. Aligned to that, we heard about the postcode lottery. What is the best way forward to ensure that the services that are delivered to the public are consistent throughout the country? Should there be an even tighter framework between those who deliver services on the ground and the Government?

**Kevin Roxburgh:** Do you mean in relation to fuel poverty in particular?

**Stuart McMillan:** Yes.

**Kevin Roxburgh:** The key element is that we are clear about the definition of fuel poverty. That was discussed at length in the earlier session. Once we have the definition, it is clear that, in Scotland in particular, rural communities tend to have more issues and more significant problems. All the data that I see tells me that.

The specific challenges for all of us are the climate, rural communities, and the requirement to target those who are most in need. Whatever the overall definition of fuel poverty and whatever the rules of engagement underneath that, we need to try where possible to identify the most vulnerable, who would appear to be people in hard-to-treat housing stock in rural communities, and to create some bias towards those people. That will give us the biggest bang for our buck or the biggest return on the programme.

That approach relies on robust data, and data is always the key issue. It is important to have relevant data that can be shared with the relevant parties at the right time so that we can take action. However, my preference is for future investment in the programme to be targeted to people in hard-to-treat housing stock in the most vulnerable rural communities.

11:30

**Eddie Boyd:** I agree. In Highland, we have a lot of highly exposed houses, which are often on their own, well away from towns and other larger groups of housing. They become a bit more vulnerable in the round and need a bit more help but, unfortunately, it tends to cost more to do anything to them. When UHIS 1 was launched, some of our more rural houses that were proposed for the scheme were taken out of it simply because of the cost. However, if the schemes had been combined we might have got a better cost for all the houses.

We must consider how we deliver programmes through the communities. If we have a single framework with a supplier who covers a vast area, a degree of trust must be built up with that supplier, especially in areas such as Highland, where it is a key issue. Therefore, we need to engage well with the communities on how we deliver the framework.

The big difference on the UHIS programme—

**The Convener:** Sorry, will you say what that programme is?

**Eddie Boyd:** Sorry. It is the universal home insulation scheme. The biggest benefit of the scheme so far is that it has gone to people rather than let people come back.

**Rupert Steele:** This is a tricky matter. I am cautious about too many top-down attempts to say where the programmes are delivered. With CESP, that backfired badly because it was targeted at particular areas, which meant that many areas, including rural ones, lost out. If there had been a broader design to the scheme, it would have been possible to help more people more efficiently. It is a shame that we are not able to deliver CESP in rural areas.

That scheme also has a complicated mechanism that encourages multiple activities in a small area rather than finding the areas of greatest need and encourages multiple measures in a particular home rather than fixing the most important measures in two homes. That rigidity can cause problems rather than solve them.

I agree that rural areas are a problem. The great majority of them are off the gas grid and, therefore, do not have access to the cheapest and most efficient heating fuel. That is a problem, and it has sometimes been difficult to get some alternative suppliers of heating fuels to step up to the mark and help those people in the way that the gas and electricity industries have done.

**Kevin Christie:** Although I agree that there should be a tighter delivery framework, what we offer needs to remain diverse. The universal home insulation scheme worked better because it was

led and delivered by local authorities. As it turns out, we know better what is needed in our areas than a national organisation would if it was not engaging with us to find out what was needed and then delivering a programme around it.

Having the funding to be able to do what we know needs to be done in our area has been a huge benefit. What we did in six months of the UHIS accelerated our insulation programme by three years. That was a great help.

However, at the same time, UHIS and all the other schemes share a problem: short-termism. Six months is not enough for an area-based scheme. We have walked away from an area with seven SIMD areas within it. Because the scheme was only for six months, the penetration there was 30 per cent of the people. We cannot cover such an area in six months. An area-based scheme takes years—that is one of the problems.

What was done in a short space of time under UHIS has been successful, but it has not been successful as an area-based scheme. It has not worked. I would go as far as to say that we need to go back to the beginning, scrap all the schemes that we have, ask what we need to do to achieve fuel poverty targets and start afresh. Up till now, everything that we have done has been a tweak of the schemes that already existed over 10 years. If those schemes had worked, would we have the problem that we have?

We need to ask the fundamental question: do the schemes work?

**Lindsey Restrict:** I would not necessarily advocate that we scrap all the schemes at the moment. However, we have specifically targeted more rural areas, where possible, within the confines of CESP. We have four projects in the Highland region, and we recently considered extending those projects and offering the measures to non-local-authority tenants—that has not been addressed within CESP. I do not know what mention was made of a postcode lottery in your previous evidence session, but we have noticed that people are either in CESP or they are not. The rigidity to which Rupert Steele alluded is such that there is no room for negotiation. We have even found that, in many areas, the issue might be divisive. Some people who want to take up the measures cannot do so; they cannot take the opportunity that the project represents.

I agree whole-heartedly with my colleagues on the panel who have said that a local approach must be the way forward to meet specific area needs. We will defer to our local authority, community-based and social housing colleagues, who know in which areas the measures are required and where the most targeting is needed.

**Stuart McMillan:** We have heard a range of interesting answers, particularly from Mr Christie, whose point about short-termism is valid. I am not sure about scrapping all the schemes, but I am a firm believer in the KISS method—keep it simple, stupid.

Given all the different schemes that exist and the different people who are involved in the landscape, there is a great deal of confusion. The previous panel made the point that we need a trusted intermediary and that the awareness raising that has happened must continue. A key term is the word “trust”. The public must trust the person to whom they speak and who speaks to them. Many people do not buy it any more when someone arrives at their door and says that they can give them something free; the vast majority of the population would ask, “What’s the catch?” and would expect to have to pay further down the line. The population are extremely sceptical about getting anything free from the energy sector—especially when it comes to energy provision, given past practices—even if it is to alleviate or tackle fuel poverty. Who would be the best-placed body or bodies to move forward as a trusted intermediary?

I have a further point that goes back to the issue of confusion—I hasten to add that this is not an attack on Scottish Power. In its written submission, Scottish Power talks about “Energy People Trust”. This morning, we had before us a representative of the Energy Saving Trust. That highlights to me the way in which the public might be confused.

**Kevin Roxburgh:** At a basic level, in all our communications, including all our billing communications, to all our customers, we offer the consumer a telephone number that they can contact to get direct independent advice if they need it.

There is undoubtedly more that we in Scottish Gas can do with the voluntary sector. We have a tie-up with the citizens advice bureaux, and we have invested via the Scottish Gas Energy Trust and the British Gas Energy Trust in various debt advice centres. However, I believe that there is more that we can do, with a broader section of the voluntary sector acting, as you say, as the intermediary.

I take your point that, if there is no trust, customers will not believe that there is anything free on the table. We are moving the agenda forward by writing to all our customers. We started a programme a number of weeks ago to encourage our customers to talk to us—to phone us about their issues or concerns or to interact with us online if they prefer that medium. We believe that correspondence alone does not do the job: we need to have a conversation.

There are therefore two tactics. First, we have the conversation with the customer and invite them to talk to us about the best deal for them and what is available through various programmes and schemes. Secondly, as a business, we need to look at what more we can do with the voluntary sector to ensure that there is an independent intermediary giving good advice.

**Eddie Boyd:** I am not sure that energy companies can fulfil the role by themselves—and neither can the other agencies that are involved.

Stuart McMillan mentioned the Energy Saving Trust. We have an Energy Saving Trust presence in our area, but that is the national brand. Energy Saving Scotland is the slightly different brand for Scotland, and our area has a project that is run by Changeworks, so people seeking the same advice could be exposed to three different names. Similarly, that same advice is given by the consumer advice services and by all the energy companies. It is therefore difficult for a home owner to know who to go to in the first place.

As in other local authority areas, information is available through the council. The council may often be the best place for people to go to first—they can then be redirected. We provide that service through money advice and other opportunities and service points where we are in contact with people. That may be one route that the council can take up as an intermediary. We would have to know where the scheme was, but I agree that one scheme from one provider is probably the best way to deal with the issues.

**Kevin Christie:** I agree with that. In order to get the trust of consumers, the intermediary should probably be a body that is Government backed or independent of the market and therefore has no gain to make.

As Eddie Boyd pointed out, there is confusion about organisations. As well as the three that he mentioned, people are encouraged to phone the home energy Scotland hotline, which is managed by those three organisations. It is incredibly confusing, and I know that people put the phone down because of that.

That takes us back to Stuart McMillan’s KISS principle. If someone phones up that freephone number for a service that is meant to help people in fuel poverty, the advisers will try to cross-sell them transport and renewables advice, even if they just want their loft insulated. If you walked into a shop saying that you wanted a new shirt and the shop assistant asked if you wanted a pair of shoes, you would say, “No, I just want a shirt”. If they then asked if you wanted a jumper, you would eventually say, “I’ve had enough”, and walk out. To a certain extent, that is the issue that we have at the moment.

The system works up to a point, but it needs to be clearer and much more focused. Advice should cover the help that the person wants. It is fair enough for advisers to go back later and offer more advice—after the insulation has been installed, the advisers could go back and say, “You’ve had your insulation; have you thought about this?” That would be a much better approach. We have feedback that says that the current approach puts people off.

**Rupert Steele:** We have had a high degree of success in working with local authorities to identify some opportunities. Since 1 April 2011, about one third of all the cavities and lofts that we have insulated have been in Scotland, and a lot of that work has come from partnerships with local authorities that have worked very well.

In some cases, finding the clients may be more specialised work than simply finding lofts or cavities that need treatment. The CERT obligation has become incredibly complex, with an overall obligation, an insulation sub-target, a priority sub-target and a super priority sub-target all interacting with one another in a non-simple manner.

We found—I think this is an industrywide problem—that it is almost impossible for an energy supplier to locate the super-priority group because energy suppliers do not know which of their customers are on low incomes. We are therefore pleased that it has been possible to arrange for the Department for Work and Pensions, which knows who those people are, to write to everybody who is on a low income to suggest that they ring a number to get insulation advice.

11:45

**Chic Brodie:** I will come at that from the point of view of data protection. Are you telling me that you, as a commercial company, deal with a Government body that provides information to people on low incomes?

**Rupert Steele:** No. The Government is writing to them—

**Chic Brodie:** Who is sponsoring that?

**Rupert Steele:** The industry has paid for the letter.

**Chic Brodie:** So the industry has paid the DWP to write to people on low incomes—

**Rupert Steele:** The letter says, “If you would like insulation, this is how you can get it.” It is a welcome development that is in the interests of those people—it gives them a chance to ensure that they get insulation. I think that the letter has been signed by Chris Huhne.

**Chic Brodie:** I do not care who it is signed by as long as it complies with data protection, and as

long as the people who receive it are protected by data protection rules. It seems to me to be a most unusual arrangement, but I have had my say.

**The Convener:** I assume that there is no problem with data protection. If the letter goes out from the DWP it does not matter who pays for it.

Do you have something to add, Mr Steele?

**Rupert Steele:** I had completed my point that a diversity of routes is really valuable as a way of getting to the various types of property that need to be insulated.

**Lindsey Restrict:** I agree with the other panel members about the complexity of the landscape—there is no getting away from that.

We recognise that there is not much trust in energy companies at the moment. We are hoping to address that and have recently published a building trust document. Kevin Roxburgh talked about the trusted intermediary. It can be quite difficult to know whom to trust or who might have another focus, if I can put it like that.

The warm home discount has come through recently. All the energy suppliers now target the core group of people on pension credit. We are looking at whether the data matching exercise that has been agreed through data protection will highlight those customers who are on a low income and have an added vulnerability. That has proven to be a challenge because of issues such as data protection, which has been alluded to.

We also have difficulty targeting the working fuel poor. People on benefits can be targeted via their engagement with social work or with third sector agencies, but the working poor can slip through the net of the programmes. That is a challenge for us, as is finding people who are in fuel poverty. We need to find mechanisms for reaching those people.

**John Wilson:** Mr Steele talked about the work that the DWP is doing to get the message over to households in receipt of benefits. Ms Restrict has just highlighted one of the problems, which is that that does not target everybody who is income poor.

Did the United Kingdom Government consider using records from Her Majesty’s Revenue and Customs to target people who experience in-work poverty and who may be in need of some form of insulation or support? HMRC’s records may show that someone who is not in receipt of benefits is on an income that means that they are in fuel poverty.

**Rupert Steele:** I am not aware of such an initiative, but it is an interesting idea. I will take it away and perhaps ask whether the Chancellor of the Exchequer would like to write to working

people on low incomes to draw their attention to the same key issues.

**Stuart McMillan:** Mr Roxburgh, you touched on your agreements with the CABx. Of the 32 local authorities in Scotland, only one—Inverclyde—does not have a CAB. What activity do you undertake with the bodies in Inverclyde?

We have heard about a few of the things that the industry is doing to build up trust. Do the industry representatives agree that one way of building up trust would be to have fewer tariffs, so that things could be made a bit simpler for customers?

**Kevin Roxburgh:** On your point about Inverclyde, as I said earlier, we are looking to expand our relationship with the voluntary sector and not rely only on the CABx. I will take that issue away and think about what we can do in Inverclyde.

**Stuart McMillan:** I can speak to you about that later.

**Kevin Roxburgh:** Thank you.

On the simplification of tariffs, we announced last week that we will move to a two-tier structure that is based on either a fixed-contract tariff, which gives the customer assurance that rates will not change over a defined period of time, or the flexibility of the existing free rate, which allows them to move to another supplier but also exposes them to the dynamics of the market. The two-tier tariff structure will be launched by British Gas and Scottish Gas shortly.

We absolutely welcome that approach to simplifying tariffs for customers. Phil Bentley, the managing director of British Gas, was on television recently saying that the simplification of tariffs was a big part of building trust. We absolutely believe in that and we have a programme to move that forward.

**The Convener:** Do not feel that you have to comment, Mr Steele, although you are welcome to do so if you want.

**Rupert Steele:** At the moment, tariffs are significantly simpler than most people think that they are. There is a basic choice to start off with. Most companies in the industry have one or two fixed offers and a variable offer, and there will obviously be different payment methods around those. There are 14 different regional charges, but people do not have a choice between those charges; they will simply go with the practice that applies in their region. There are also issues around heating tariffs. For example, people with electric heating need special discounted electricity rates at night to charge up their storage radiators, otherwise their bills would go through the roof.

So, we start off with a relatively small choice of tariffs—perhaps three or four—but, by the time we multiply them up by all the permutations, we can get to some quite big numbers of the sort that people like to put in press releases. However, if people were asked whether we should get rid of discounted tariffs for people with electric heating, they would say no. A little caution is needed in approaching this area.

We are continuing to offer a number of special-offer discounts both online and through offline channels. I am not particularly apologetic about the fact that we are offering people some good deals to switch to Scottish Power. I am not sure that it is in the interests of consumers that we should withdraw those deals.

**Angus MacDonald:** Just to add to the confusion around helplines, I met representatives from Energy UK last week, and it has a home heat helpline, which redirects consumers to one of the six major suppliers. I take on board Kevin Christie's point that there should perhaps be only one helpline that is independent of the energy suppliers.

Kevin Roxburgh mentioned smart meters. Committee members have received information from Energy UK, among others, about the roll-out of smart meters throughout the country over the next few years. Although there is still some work to be done on that, I am interested to know whether the panel members feel that the introduction of smart meters will contribute to the alleviation of fuel poverty and, if so, whether it is advisable to start with the poorest households.

**Kevin Roxburgh:** There are several issues with smart meters and I will try to cover them one by one.

The first issue is the availability of the smart meter technology. We are currently running with what is called a phase 2B smart meter, which will be upgraded to a phase 3 smart meter in the new year. I am no expert, but I can give a layman's view. The phase 3 smart meter gives us all the bells and whistles that we need to move the technology forward and run the industry better. That technology must be in place before we go for a large roll-out of smart metering across the industry. It allows interoperability from a standard platform from which customers can move between suppliers without any problems.

The second issue relates to the point about whether smart metering would help vulnerable customers. I absolutely believe that knowledge is king. Giving customers insight into their consumption patterns and the energy consumed by the various appliances that they use gives them choices about when to use appliances and helps them to understand more about what they can do

to be energy efficient. That knowledge is very important.

Customers will also have an option to move between a credit meter and a pay-as-you-go arrangement at the flick of a switch as opposed to having to go through a meter exchange. That can make a compelling case for some customers, depending on their lifestyle choices. For example, many customers might choose to pay for their energy as they go, knowing that they are paying for exactly what they use and that estimated—and possibly overestimated—bills have become a thing of the past. Such things are important in relation to what a smart meter will bring to the consumer.

You asked about vulnerable customers, but I think that this is more about individual customers and their lifestyle choices than whether certain customer segments go for early smart metering or whether they come later in the roll-out programme. There is a danger in grouping customers together and saying, for example, that smart meters are right for all vulnerable customers. There are specific reasons why that might not be true. However, in general, giving the customer the insight and knowledge that they will gain from the in-home display and smart meter technology will allow them to make some choices about their energy consumption, and to be smarter about it. That might help with consumption patterns.

**Kevin Christie:** In a lot of cases, smart meters might not help the individual that much. It is fine to have the information, but people need to be able to take in that information and make choices. Smart meters might help advice organisations to identify the fuel poor so that they can tell them they can save money. Some customers will use smart meters but it will depend on how easy they are to use. Some people cannot control their heating systems, and I assume that smart meters will be slightly more complex than a straightforward controller for the central heating.

Some people will be able to use the information to make decisions, but they will still need to be supported—that is particularly true of the vulnerable. We cannot forget that smart meters will not be an answer on their own.

12:00

**Rupert Steele:** Smart meters and the information that they provide will be helpful to consumers. If consumers are more aware of how their bill is building up, they will be able to look for economies if they want to or plan other expenditure so that they are in better shape to manage their bills. It will be helpful for people who have difficulty budgeting to have better information, because that will give them more

opportunities to be more efficient in their energy use.

I am a bit more cautious on the question whether we should direct the roll-out of smart meters to particular groups of people. The roll-out is going to be quite a difficult exercise to organise, engineer and manage. If it goes wrong, it will lead to chaos in the billing systems, so it will be important to focus on getting it right. The roll-out needs to be done efficiently and at reasonable cost, because that cost will flow through to consumers. I would not want to put too many constraints on the way in which we do it. We have already said that it is difficult to find fuel-poor people, so we will try as best we can to roll out smart meters in a methodical, ordered programme, rather than picking out particular customers.

**Lindsey Restrict:** I do not think that the technology alone will necessarily help, but we would welcome anything that gives a consumer insight into their energy use and opens up a dialogue that allows us to do what we can to help customers to reduce their energy use through energy efficiency measures.

**Angus MacDonald:** With regard to the phase 3 roll-out, I guess that we are unlikely to reach the target by 2016. Presumably it will not be fully rolled out by then, if phase 3 is still at an early stage.

**Kevin Roxburgh:** Scottish Gas and British Gas plan to do a significant ramp-up of smart meter deployment in 2013. We have sizeable numbers—tens of thousands—of meters on walls today that are of the phase 2 type. There will be more phase 3 meters in 2012, but the big ramp-up, involving significant numbers, will take place in 2013.

**The Convener:** As a courtesy to our third witness, who has been waiting patiently, we should try to draw a line under our questioning of this panel by 12.20. I ask Mike MacKenzie and John Wilson to keep their questions fairly brief.

**Mike MacKenzie:** I am working on my brevity, convener. First, I declare an interest: my community benefited greatly from the Scottish Gas green streets programme, which provided a range of energy efficiency measures. I did not benefit from that personally, but I have a warm place in my heart for Scottish Gas as a result of the programme. I also take this opportunity to thank Scottish Gas for its helpful intervention in the saving of the Mid Argyll swimming pool. Without apology, I am giving Scottish Gas a wee plug here.

That feeds into two important issues that were touched on earlier. The initiatives I mentioned were helpful in establishing trust, and Stuart McMillan talked about the importance of trust. The

other issue was community and consumer education.

My question is for Kevin Roxburgh. Scottish Gas recently installed what I believe is the largest solar PV installation in Scotland. Will the UK Government's announcement of its intention to cut the tariff by about 50 per cent affect the uptake of that technology? I do not mean that in a commercial sense; I am thinking more of housing associations, which have used the technology as part of a range of measures to help to tackle fuel poverty.

**The Convener:** To be honest, I think that the link to fuel poverty is rather tenuous, but I will let Mr Roxburgh answer the question.

**Mike MacKenzie:** I am sorry that you say that, because I think that you are incorrect. That is one of the aspects of the subject on which education is required, which I will happily talk to you about later.

**Kevin Roxburgh:** I think that Norrie Kerr answered the question in the previous session. My view is that the feed-in tariff is linked to the cost of the installation and the technology. The price of the technology will come down—I understand and accept that—but at this point in time, I believe that a kick-start is needed. Anything that we can do in the short term to give a kick-start down the PV route would be helpful. It was disappointing to see the feed-in tariff being cut to such an extent so early in the technology's deployment. At this point in time, I believe that it would be right to do anything that gave a bit of support for and kick-started the PV programme but, in the long term, the tariff should be cost-reflective.

**Mike MacKenzie:** Thanks.

I have just one more question, which is for Mr Christie and Mr Boyd. It relates to microgeneration and renewable heat technologies. These days, I find that my inbox is fairly full of complaints from people who wish to install some of those technologies in their homes, partially to address fuel poverty, but who run up against difficulties in the planning system. Do you have any experience of that? At your local authorities, do the planning authority's planning policies take account of fuel poverty? Is there a recognition that such technologies can provide at least part of the solution to fuel poverty?

**Eddie Boyd:** I cannot speak directly for my planning colleagues, but we have been looking quite closely at the contribution that microrenewables can make to tackling fuel poverty. They perform a role, in that they reduce the amount of energy that people have to acquire to heat the house to the standard that they want. That is quite a big driver for the roll-out of the technology.

A lot of thought has to be given to the appropriateness of a technology for a house, what it is likely to provide and how it will affect other people. For example, an air-source heat pump will have a fan, which will run for a substantial amount of time. We have to think about the noise impact that that will have, day and night, on neighbours and other people. With careful thought, I think that all such things could be accommodated, but it is right that the planning authorities should have an input into the process, so that the effect on people who will not benefit from the technology is minimised.

**Kevin Christie:** Prior to working for Aberdeen City Council, I spent six years in renewables development mainly for domestic and small-scale community use, so I am quite aware of the frustrations with the inconsistencies of planning offices. It is certainly something on which we have had engagement. Prior to working for the council, I had a sort of ready-reckoner that helped people to know what the likelihood was of their proposal being acceptable. The information is there. If someone is interested, support is available and is being provided on a more consistent basis in the city, so it is more helpful than it was. There has been a big improvement.

**Mike MacKenzie:** Are your planning colleagues fully on board with the need to tackle fuel poverty and the need for their planning policies to be directed at least partially to that end?

**Kevin Christie:** No—fuel poverty will not be the driver for them. They are more aware of what the microgen technologies are, and they are more supportive of them than they were, but not from a fuel poverty perspective—that is not the main driver.

**Rupert Steele:** I have a point to add on feed-in tariffs. It is important to recognise that the feed-in tariffs are paid for by other consumers. It was projected that, at its previous level, the feed-in tariff for photovoltaics would, within a very short time, add something like £26 to the average electricity bill of everyone across the country. Against that background, I think that the Government had no choice but to address the issue.

In the way that the changes were announced, the Government was perhaps guilty of a little carelessness as to the impact on people who were in the middle of doing things. However, it is wrong to say that feed-in tariffs at that kind of level are alleviating fuel poverty. I suspect that they are probably exacerbating it.

**Mike MacKenzie:** I am glad that you raised that point. Are you aware that the uptake of the feed-in tariff for solar PV in Scotland is less than 1 per cent of that in England and that most of the uptake

is in the south of England? Do you therefore agree that consumers in Scotland are subsidising people in the south of England through the feed-in tariff for solar PV? That seems to be the effect of the situation that you describe.

**Rupert Steele:** Scottish Power has always been sceptical of those very high-level tariffs—

**Mike MacKenzie:** I ask you to answer my specific question.

**The Convener:** To be fair, that is a matter of Government policy. You can put the question to the witnesses, but it is not necessary for Scottish Power to give an answer. If Mr Steele wishes to comment, he is welcome to, but it is not really a question for him.

**Mike MacKenzie:** I am happy to withdraw the question.

**Rupert Steele:** The only observation that I would make is that photovoltaic panels tend to work best in sunnier places.

**Mike MacKenzie:** I have one brief further question.

**The Convener:** You are eating into Mr Wilson's time, so you will need to be very brief.

**Kevin Christie:** Convener, I have a quick comment on the feed-in tariff. Mike MacKenzie is right that the feed-in tariff did not work for PV in Scotland. However, I hope that the renewable heat incentive can work the other way and help us to recover some losses, because we have higher heating tariffs. That might not happen—it depends on whether the scheme is based on the EPC or the NHER.

**The Convener:** Hold on a second—that is more acronyms from Mr Christie.

**Kevin Christie:** Sorry. They are the energy performance certificate and the national home energy rating. I was listening when Norrie Kerr explained the difference, which is that the NHER takes location into account, whereas the EPC does not.

**Mike MacKenzie:** Thank you. I have no further questions, convener.

**The Convener:** Right. I come to John Wilson.

**John Wilson:** Given the time that I have been allotted, I will try to be brief with my three questions.

Earlier, Scottish and Southern Energy and British Gas indicated that they have a 9 or 10 per cent CERT target and a 25 per cent CESP target. I hope that the official report will know what those acronyms are by now. Will the energy companies say how much of the targets they will achieve by the end of the target period? We keep hearing that

the energy companies find it difficult to achieve those targets. Is that the case, or are we being misled?

**Kevin Roxburgh:** That is the case—it is difficult to hit the targets. Phil Bentley, the managing director of British Gas, wrote to Chris Huhne just last week stating that we do not believe that the targets are achievable in the current programme. Therefore, we are seeking an extension and dialogue on how we can improve the programmes so that we have a win-win for consumers and suppliers, and so that the Government gets what it wants. We do not believe that the current targets are achievable.

**Rupert Steele:** We have grave concerns about the deliverability of the targets. They have an excessive micro-detail that does not relate to the reality of delivering them on the ground. For example, CESP has the concept of saving notional carbon, which is not the same as real carbon. Many times more notional carbon savings are achieved if lots of measures are put into one home. However, the suppliers find that it is not possible to put as many measures into each home as was thought would be possible, so the measures have to be put into different homes. We end up with the bizarre situation that we are saving more real carbon than the target but less notional carbon, because of the complicated formula that is used to calculate it.

12:15

The other factor is that CESP is too complicated and, for each scheme, the Office of the Gas and Electricity Markets has to go through an elaborate statutory approval process with no scope for applying common sense. As a result, a huge proportion of the total obligation gets stuck in the system while Ofgem attempts to apply an overelaborate rulebook before releasing the schemes for activation. The situation is very difficult.

As for CERT, we are trying to find super-priority-group customers without having data on people's income. That, too, is incredibly difficult to deliver. We need to address the real problems in delivering the programmes.

**Lindsey Restrict:** I simply reiterate my energy colleagues' comments. CESP's rigidity is proving quite challenging—she said, with some understatement—and we have already discussed CERT's new focus and targets as a result of the extension to the super-priority group, the insulation obligation and what have you. It all comes on the back of a number of like-minded cavity and loft insulation programmes, transformations of programmes and variations on a theme. For example, we have gone from standards of

performance to the energy efficiency commitment to EEC 2 and finally to CERT. We hope that we can take advantage of the low-hanging fruit, particularly now that we have a game-changer in the form of the green deal and the energy company obligation, but I agree with my colleagues that we are finding the schemes quite challenging.

**John Wilson:** I thank Ms Restrick for using the low-hanging fruit analogy, which has been mentioned twice already today. What kind of big stick do we need to reach the higher-hanging fruit in order to resolve the current problems? The energy companies and our first panel of witnesses have said that getting the low-hanging fruit is easy enough, but what about the more difficult-to-reach households that need more help and support? How do we put those targets in place? I suspect that, given the time, you will have to send answers on a postcard.

Finally, witnesses in previous sessions have highlighted issues to do with the ownership rather than the types of houses, including, for example, the fact that certain private landlords are not carrying out energy efficiency work on their properties and are penalising their tenants as a result. Would the panel wish to comment on those concerns? Again, you might have to send answers on a postcard.

**The Convener:** I ask the panel to comment very briefly.

**Kevin Christie:** Indeed. Private sector landlords can be dealt with in a relatively simple and straightforward way through legislation. For example, we have the SHQS for social housing providers and the same measure could be made to apply to private landlords to ensure that, in those circumstances, properties could not be rented out.

It is more difficult to target other measures. After all, we have mixed-tenure flats—

**The Convener:** I am sorry, Mr Christie, but what does SHQS stand for?

**Kevin Christie:** Scottish housing quality standard. There are too many acronyms.

As I said, it is difficult to target other measures in certain areas. For example, we have struggled to get the cavities done, although the lofts are almost there. The problem is funding. The work is not difficult, just expensive.

**Rupert Steele:** My postcard reads as follows: we can deliver more expensive measures, if the householder is willing to have them—there is a bit of a question about owner-occupiers' appetite for solid wall insulation. We can deliver that, but it is very costly. If the programme might cost 10 times as much as the existing insulation programme,

that means either that we will have to go 10 times more slowly or that we will have to put 10 times more money on bills to pay for it, and there is a question about whether that would be in consumers' interests.

There might be some properties that it is not cost effective to treat, and someone would need to decide whether to accept that that is the nature of such properties or to treat the properties regardless, with other consumers paying.

The green deal provides the alignment of incentives for landlords and tenants that the existing rules do not provide. The UK Government has said that, in a few years' time, there will be restrictions on letting properties that have very low energy efficiency—I guess that that might apply only in England and Wales. There is clearly a balance to be struck in the context of housing policy issues.

**Kevin Roxburgh:** Data is the key to reaching out and insulating the houses that we have not got to. Scottish Gas has ring fenced £20 million for insulation for Scottish customers. We understand and accept that there is a high cost in homes that are more difficult to treat, so we have ring fenced money for that. However, data is key to identifying the target audience and how we can get to them.

I agree with Mr Christie on the private landlord issue. Legislation seems to be a possible option. However, I am not sure of the volume that is involved and I would like some numbers around that. I hear anecdotal comments about private landlords being a barrier to improvement, but we need to know the numbers and we should be careful not to put all private landlords in one category.

**Lindsey Restrick:** If the Parliament goes down the legislation route, the key point is that the legislation must enable us practically and realistically to identify and target the people who are most in need. That is the bottom line. Whatever legislation is brought in, it must take account of the volumes and it must enable people who need insulation to get it.

**The Convener:** Thank you all—

**Chic Brodie:** Convener, in view of the comments about contact between the energy suppliers and the DWP, which I regard as a serious situation, I ask that you write to the Secretary of State for Energy and Climate Change, Mr Chris Huhne, to ask for details of how much the supplier companies are paying for the use of a large Government database and what conditions pertain thereto. Will you also write to the Information Commissioner's Office to determine whether, if information is being passed to the supply companies, the Data Protection Act 1998 is being breached?

**The Convener:** On the clerk's advice, I suggest that we look into the issues further. I will be happy to come back to you when we have done so. You have raised a legitimate concern, although I must say that I am not concerned that there is a data protection issue. I will take advice and come back to you at our next meeting with a suggested course of action.

**Chic Brodie:** I would prefer to go through the committee, convener.

**The Convener:** I was suggesting that I bring the issue to the committee at our next meeting, if you are happy with such a course of action.

**Chic Brodie:** Thank you.

**The Convener:** I thank the witnesses for coming. I appreciate that this has been a long meeting.

12:24

*Meeting suspended.*

12:31

*On resuming—*

**The Convener:** In our third and final panel, I welcome Richard Atkins, from the Royal Incorporation of Architects in Scotland. I apologise that we are slightly overrunning this morning. Thank you for coming.

**Richard Atkins (Royal Incorporation of Architects in Scotland):** I am delighted that the Royal Incorporation of Architects in Scotland has been invited to provide witness evidence. I am a practising architect and I sit on the national council of the royal incorporation. I also chair a sustainability task group. I have been very involved in establishing our energy design certification scheme, which was approved by Scottish ministers in 2007, and our sustainable building design accreditation scheme, which accredits architects who have greater skills in sustainability. I have also been involved in establishing the on construction domestic energy assessors scheme with the Chartered Institute of Architectural Technologists and the Royal Institute of British Architects in England and Wales. That is my background—I am not quite sure how it happened, but I seem to have wandered into what is perhaps the energy cul-de-sac of building design.

**John Wilson:** I attended an event a couple of weeks ago with committee colleagues at which a speaker said that the current strategy for energy efficiency cavity wall insulation is having a detrimental impact on some homes and queried whether such insulation could be detrimental for

the type of house build that it is currently being put into. Could you comment on that?

**Richard Atkins:** I echo that cautionary view. As you can imagine, the royal incorporation is very supportive of any initiatives that deal with energy efficiency, sustainability and fuel poverty. The influence of the built environment on people's wellbeing is huge. It is outrageous that, in the 21st century, we have houses that are poorly insulated and suffer from condensation.

On cavity wall insulation, I suppose that I should start with the point that building physics are extremely complex. Different buildings work in very different ways depending on the form of construction, the materials used, the interventions made during their building lives, the heating regime and the heating systems. All that adds up to some very complex physics to do with the way that moisture moves through the building fabric and how rain penetration is dealt with.

Modern construction, particularly modern housing in the Scottish context, is often described as being a plastic bag inside a timber crate inside a concrete box or cave. We rely on dealing with moisture movement by creating barriers to it, either by vapour barriers that are plastic membranes inside the building or by cavities. The cavity is there for a very good reason, which is to keep the water out. As soon as you fill it with something, the question has got to be whether that will allow moisture to track across the cavity. Probably in the majority of instances the risk of that is relatively low. If you have a relatively well-sheltered dwelling and an external harl coating, you have a relatively good barrier to moisture before it gets to the cavity.

In other cases, the external coating is more friable, particularly where there are high levels of wind-driven rain, as is the case with more exposed properties. Much depends on the quality of the original construction. When a cavity wall is built, the two sides are tied together, and there can be a problem with what are known as snorters. Basically, the mortar drops down, hits the cavity tie and creates a little bridge. If a cavity is already breached because the mortar joints are not properly filled, there is significant potential for moisture to track through and wick into the inside of the building, but that will not be discovered until insulation is inserted in the cavity and the effect of the wind and rain becomes evident.

**The Convener:** This is all very informative, but I think that you are at risk of getting a little bit too technical for some members of the committee, myself included. What we really want to know in response to Mr Wilson's question is simply whether there are issues with cavity insulation.

**Richard Atkins:** There can be, yes.

**The Convener:** Clearly, there are.

**Richard Atkins:** That is not to say that cavity insulation should not be part of the mix of measures to increase energy efficiency and reduce energy bills.

**John Wilson:** Convener, I was enjoying Mr Atkins's technical knowledge of cavity walls and the insulation measures that can be put in place. There is an issue here. In the past decade, lots of money has been spent on the installation of cavity wall insulation, but it might have had a detrimental impact on some of the properties in which it has been installed.

I move on to my other question. How can households find out how energy efficient their homes are? We heard from the energy companies on the previous panel about households that are difficult to reach in terms of getting energy efficiency measures in place. How does a household know whether its property is energy efficient if it is not in the district-wide schemes that local authorities or the energy companies operate? How would an individual go about finding out the energy efficiency level of their home?

**Richard Atkins:** That is an extremely good question. We have perhaps missed a major opportunity, although we can recover from that. You discussed the production of energy performance certificates earlier. The background is that the certificate is just a piece of paper that gives the consumer information about the theoretical energy use of their building. It is asset rated; just like the information on miles per gallon that someone is told when they buy a car, it is based on a standard set of assumptions about how the person is going to use the building. The calculation is done by taking well over 100 inputs and mungeing them through a complex algorithm to produce quite a simple answer.

To date, EPCs for existing dwellings, where they are required, have been registered in Scotland through the home energy efficiency database, which you have heard about. I believe that it is run by the Energy Saving Trust. It has a big bucket of other information in it, but what we do not adequately keep is the input data that go into the algorithm. That is where we would find the information that would identify whether specific properties have particularly high energy use because of a number of elements, such as that the level of insulation is poor, the boiler is poor or the control systems are poor. We should keep all the information in the data set, not least because the algorithm keeps changing. It is refined as people understand more about how these things work. We do not have the opportunity to go back and recalculate all the old EPC information, so EPCs go out of date fairly quickly.

To know the energy efficiency of a person's property, we need both that information and the actual bills—the information that comes from smart metering. That will enable them to say, "My bill is this, but what could it be?" I will give an analogy that I often use. There could be two identical houses. The house on the left has a family of four who live there all the time. They have the windows open, they do lots of washing, and the house is heated to a warm temperature. Next door are a couple who go and live in their villa in Spain for six months of the year. The houses will have completely different energy bills, but their EPCs will be identical. We need both bits of information in order to know what the energy efficiency of the person's property is and what it could be. It may be that they are living in a house that is difficult to treat.

**Mike MacKenzie:** You talked about part 6 of the building standards and the SAP calculation. I am sure that you will agree that that favours renewable heat devices and microgeneration and so on. Have you come across any problems with planning authorities when, in designing a house that will comply with energy standards, you have found that you have to use some of those devices yet the planners are not keen on them?

**Richard Atkins:** That is a very real problem, probably less so for new dwellings but certainly in refurbishments, particularly in our historic cities, where certain views are considered as extremely important and there is resistance to putting on photovoltaic roof panels or solar hot water panels.

Interestingly, there is other fairly recent legislation and regulation that have similar effects. A colleague on one of our committees highlighted a new planning guidance note to do with noise, which applies throughout Scotland. In some areas, that note is being used to prevent the installation of medium-sized wind turbines.

Although I am not a great fan of what we call eco bling—"Let's just buy a bit of technology and bolt it on and that will solve all the problems"—I think that it has its place, for example in off-grid properties where a moderately sized wind turbine twinned with a heat pump is quite viable if there is no opportunity to put in a gas main. When someone is on-grid, with a gas main, their carbon footprint with the gas is probably lower than a wind turbine plus heat pump. Cost-wise, it is completely different.

**Mike MacKenzie:** You would agree with me though that some of those technologies can offer solutions for fuel poverty.

**Richard Atkins:** Absolutely. Unfortunately, there is no magic bullet. A raft of measures, regulations, legislation, incentives, technologies

and simple housekeeping will be needed to solve the problem.

**Mike MacKenzie:** On a slightly different theme, what you would say if you were called in as an architect to give energy advice for a typical house that was built in 1960 and your brief was to bring that dwelling up to current standards of insulation that would comply with the SAP 2010 calculation? Will you talk us through that, in layman's terms? What would be the practical implications and costs of that, if it were possible?

**Richard Atkins:** Anything is possible, obviously, and it is down to cost. That is a good question, which highlights the trigger point for a refurbishment. I have done projects in properties dating from the 1950s in which we can demonstrate an 80 per cent carbon reduction and for which the trigger point was the requirement for thorough refurbishment. Everything including the services, the electrics and the decoration had reached the end of their lives. The additional insulation requirements might be a combination of internal wall insulation, external wall insulation and cavity insulation, depending on what had been built up in the existing property. We would bring loft insulation up to the full standard of one foot of insulation without thinking about it, as long as the ventilation in the roof space was controlled, and we would install an efficient heating system.

All those taken together can achieve energy efficiency gains. The marginal cost of all the other things that you need to do because of the age of the building would be just viable within a payback period. If you are coming from the other end of the scale, and there is no trigger for refurbishment of a building other than the aim of energy efficiency, the heating system, electrics and so on would be part of the cost of the insulation project, if you like. They are collateral damage, and the payback in cost terms disappears off the scale.

It is physically possible to bring such houses up to current standards of insulation. Sometimes very small properties will be constrained in terms of how much can be done with a bit of internal insulation. For older properties in conservation areas, there will probably be impediments to putting on external wall insulation, and there could even be impediments to replacing windows with fully double-glazed ones. However, if the property in question is representative of most local authority housing stock dating from between the 1930s and the 1970s, bringing it up to current standards is technically achievable.

**Mike MacKenzie:** As you know, about 30 per cent of the housing stock has been designated as being hard to heat, more in the middle range is a bit easier to deal with, and a small percentage that was built recently is well insulated. What would be the rough cost of bringing the energy efficiency of

those first categories of homes up to standard, given that one would have to foot the bill for all the other things that would have to be done? Could you give me an idea of the cost per dwelling? We could multiply that by 2.2 million, which is the approximate number of dwellings that are not so energy efficient.

12:45

**Richard Atkins:** I am fond of doing back-of-the-envelope calculations, but to do this one could create a huge hostage to fortune. A deep refurbishment project to completely meet all the standards for a dwelling could easily cost between £500 and £600 per square metre. If we are talking about dealing with the bulk of the problem—applying the Pareto principle and getting 80 per cent of the way there and not reaching the stringent 2010 standards, which will increase by 30 per cent in 2013—we would adopt the low-hanging-fruit solutions about which we have been talking. We would replace the boiler, install thermostatic radiator valves, insulate the roof and draught-proof or replace the windows. All that could probably be done with a budget of £5,000 to £10,000, depending on the size of the house. The low-hanging fruit will be obvious, and dealing with it will pay for itself but—as an earlier witness said—we seem to have come to the end of the low-hanging fruit. Reaching the high-hanging fruit involves using a very long stick.

**Mike MacKenzie:** I have a final brief question. John Wilson talked about cavity wall insulation. Can you give us an idea—perhaps using U-value or some layman's term—of how effective filling a 50mm or 2in cavity with insulation is in improving the overall energy efficiency of a home?

**Richard Atkins:** It is potentially very significant. Calculation methods for insulation values are relatively simple, but how accurate they are in reality can be questioned. I recently co-authored for Historic Scotland a report on some properties in which it was interested. In parallel to that, live U-value tests were done. In calculating U-value, there is a theoretical calculation, but live tests can also be done on site. Live tests tend to show that the overall U-value for a traditional Scottish construction is a bit better than the theoretical calculation would suggest. The calculation will be quite linear, so as insulation is added, the U-value steadily gets better. The way in which that translates into energy use in a dwelling is quite different. In terms of energy costs, the energy that is required to heat a dwelling is not linear. It is like a—I do not know what it is called.

**Mike MacKenzie:** Do you mean a parabola?

**Richard Atkins:** Yes, it is parabolic. Basically, if you take a slice of that out at the bottom, you can

see that there is a much greater impact in terms of the energy that you are saving than if you take out the same slice at the top. That is a short way of saying that adding even relatively little insulation has a big impact. That addition of more insulation has progressively less impact.

**Mike MacKenzie:** Perhaps I could rephrase the question. Without getting into quadratic equations, I am trying to get at how effective filling a 2in cavity is compared with the modern house that complies with the current standards. How close does it come?

**Richard Atkins:** I am trying to avoid giving a technical answer. On U-values, it is possible to get pretty close. However, the regulations do not purely work by driving U-values.

**Mike MacKenzie:** Okay, let me put the question another way. If I was building the wall of a modern dwelling-house using polystyrene, polyurethane or even polyisocyanate insulation, what thickness of the material of which you put 50mm into the cavity of an older house would I need to put into the wall?

**Richard Atkins:** If a high-performance poly-type product was being used, as opposed to mineral wool or sheep's wool, the thickness would probably be in the order of 80mm to 100mm.

**Mike MacKenzie:** That would be 100mm of what material?

**Richard Atkins:** It would be something like expanded polystyrene board.

**Mike MacKenzie:** Will you check that and write to the committee on it?

**Richard Atkins:** I would be more than happy to go away and do the calculation. Different insulations all have different resistivity values, which can vary extensively within families of products. It is an interesting exercise, which I will do and on which I will report back.

**Chic Brodie:** Domestic gas usage has dropped by about 19 per cent over the past five years, while non-domestic gas usage has dropped and then increased. What is your view on that? Gas usage varies substantially throughout Scotland from council area to council area. How much do local authorities engage with you at the early design stage? How well are they embracing energy efficiency?

We have talked a lot this morning about the proliferation of bodies that are involved and about a national framework. What are the weaknesses of the current approach and what aspects of it should we consider?

**Richard Atkins:** I am sorry: will you remind me of the first point?

**Chic Brodie:** My point was that domestic gas usage has gone down by 19 per cent, whereas non-domestic usage has not.

**Richard Atkins:** The drop in domestic gas usage is probably indicative of the success of some of the boiler replacement, loft insulation and cavity wall insulation programmes. I suspect that the relative growth of the economy from the mid-1990s up until the crash in 2008 is a factor in the non-domestic usage.

We are still adding physical built space to Scotland—roughly 1 per cent floor area per annum—and there are big issues to do with how well the existing building stock is being used. For large numbers of publicly owned buildings, buildings in education establishments and even commercial buildings, the asset is probably not being sweated as hard as it could be. There are a number of reasons for that. Earlier witnesses touched on one of them, which is that even though we think of energy bills as being high—certainly, fuel poverty is a major issue on the domestic side—energy costs are a relatively small part of the total costs for most businesses.

If a service business has an office with 100 staff, the staff costs are by far its biggest business cost. The cost of the building will probably be significant, but it is not the big headline number on the business's bills. The cost of energy to run the building comes out as a small number relative to the total.

I am quite confident in saying that the commercial Scottish building stock—I know that we are going slightly off tack—could probably get a 15 to 20 per cent efficiency gain quite simply by taking steps in relation to management and use of buildings and control of building systems. We have a habit of building overly complex buildings with overly complex systems; those are great if they are being used and optimised, but they can have a significant impact if they are not. That is down to knowledge and education, and to ensuring that someone in a building is given the responsibility for running it.

There has not been much in the way of council house building for the past couple of decades, although some local authority housing schemes are now coming on stream. I know some of the architects who have been involved in them, and I know that they understand energy efficiency and sustainability, which are drivers for those new-build projects. I do not have information on how involved architects are in the existing housing stock and the framework arrangements for major refurbishments with local authorities and housing associations.

I should stress that a surprisingly large percentage of all the construction work that takes

place in Scotland does not involve architects or architectural technologists who might be able to provide the information that we are talking about. That is certainly the case with smaller-scale works such as minor alterations, refurbishments, the addition of small extensions and so on. In terms of the framework arrangements and the various bodies that you have heard about, there is a huge proliferation of architects, but they tend not to get involved in small projects. If you are a home owner who is trapped in fuel poverty, your first instinct is not to pick up the phone and find the nearest architect.

By providing targeted design advice for people's homes, based on how they live and the systems and budget that they have, architects can add value in terms of available opportunities. Of course, that involves a face-to-face discussion, which is more expensive than using a call centre that employs people who are incentivised to promote loft insulation or cavity wall insulation but who do not have the time, incentive or technical background to discuss the issues with a client—who, of course, will likely also not have a technical background and will not understand building physics. I am not sure how you would square that circle. Doing it properly requires time, knowledge and input. However cheaply the architect works—we earn a lot less than most people think—that is still much more expensive than running a call centre.

**Stuart McMillan:** I imagine that the face-to-face discussions would take place more with housing associations and local authorities than with individual households.

**Richard Atkins:** Absolutely—because the investment in cost terms of that discussion and input is relatively small in proportion to the scale of the projects that local authorities and housing associations deal with.

**Stuart McMillan:** With regard to the technical and planning changes that have taken place in recent years, what has been beneficial to what you do and to helping to tackle fuel poverty? What changes would you like the Scottish Government to make over the course of this parliamentary session?

**Richard Atkins:** I am delighted to have been asked to represent the Royal Incorporation of Architects on the working group that will deal with improvements to section 6 of the Building (Scotland) Regulations for 2013. The Government has made big strides, in terms of raising the performance threshold. At the moment that performance—for obvious reasons—relates to new buildings. Some elements of section 6 encourage consequential improvement; that is, it suggests that people who want to build extensions should also consider other things. Such elements

have to be built on, although that still covers only a relatively small number of dwellings.

Total building warrant application numbers at the moment are around the 40,000 or 50,000 mark, of which as many as three quarters might involve small housing alterations. However, some of the figures that I have picked up from my research over the past couple of days—and which were confirmed earlier—suggest that the problem involves between 600,000 and 900,000 dwellings.

The requirement for legislation that considers improvement at the point of tenure change also has a role to play in that regard. Certainly, the SHQS has a role to play. However, the energy requirement in them is nowhere near that in the current building regulations. All those elements have roles to play, but the question is how to target dwellings for which there is not a landlord who is required to make improvements or an owner who is renting out the property in a way that is covered by legislation. How you target the vast bulk of dwellings—whether by draconian legislation or through incentive programmes—is up to Parliament, not architects. Obviously, we will help in any way we can.

**The Convener:** Thank you for your attendance. I am sorry that we delayed you for some time, but you have been very helpful.

*Meeting closed at 13:01.*



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