ECONOMY, ENERGY AND TOURISM COMMITTEE

Wednesday 12 November 2008

Session 3

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ECONOMY, ENERGY AND TOURISM COMMITTEE
22nd Meeting 2008, Session 3

CONVENER

*Iain Smith (North East Fife) (LD)

DEPUTY CONVENER

*Rob Gibson (Highlands and Islands) (SNP)

COMMITTEE MEMBERS

*Ms Wendy Alexander (Paisley North) (Lab)
*Gavin Brown (Lothians) (Con)
*Christopher Harvie (Mid Scotland and Fife) (SNP)
*Marilyn Livingstone (Kirkcaldy) (Lab)
*Lewis Macdonald (Aberdeen Central) (Lab)
*Dave Thompson (Highlands and Islands) (SNP)

COMMITTEE SUBSTITUTES

Nigel Don (North East Scotland) (SNP)
Alex Johnstone (North East Scotland) (Con)
Jeremy Purvis (Tweeddale, Ettrick and Lauderdale) (LD)
David Whitton (Strathkelvin and Bearsden) (Lab)

*attended

THE FOLLOWING GAVE EVIDENCE:

Nicholas Gubbins (Community Energy Scotland)
Rob Hastings (Crown Estate)
Colin Imrie (Scottish Government Enterprise, Energy and Tourism Directorate)
Alison Kay (National Grid)
Audrey MacIver (Highlands and Islands Enterprise)
Brian Nixon (Scottish Enterprise)
Robin Presswood (Fife Council)
Dave Watson (Unison Scotland)

CLERK TO THE COMMITTEE

Stephen Imrie

SENIOR ASSISTANT CLERK

Katy Orr

ASSISTANT CLERK

Gail Grant

LOCATION

Committee Room 1

Scottish Parliament

Economy, Energy and Tourism Committee

Wednesday 12 November 2008

[THE CONVENER *opened the meeting at 09:31*]

Decision on Taking Business in Private

The Convener (Iain Smith): Good morning, colleagues, and welcome to the 22nd meeting in 2008 of the Economy, Energy and Tourism Committee. I remind members, witnesses and members of the public to please switch off all mobile phones and BlackBerrys rather than just switch them to silent, because they can interfere with the sound system. It is rather warm in here, so if anyone feels the need to take their jacket off, please feel free; I will do so if it does not cool down a bit.

Agenda item 1 is consideration of whether to take item 3 in private. It is parliamentary practice that the committee's report on the budget to the Finance Committee is published when the Finance Committee publishes its report. It would not make sense for us to deliberate on our report in public, because it should remain private until the Finance Committee has considered it. I hope that members will agree to take item 3 in private.

Members *indicated agreement*.

Energy Inquiry

09:33

The Convener: We move to item 2, which is the first public part of our energy inquiry. We have already requested written evidence, and a large folder of it is available to members. We agreed to start our inquiry with a series of round-table meetings and fact-finding visits to set the scene for the more formal evidence-taking sessions that will take place in the new year. We are keen to find out what witnesses think are the key issues in determining and delivering Scotland's energy future and where they think their organisation fits in. I thank all the witnesses who have come along this morning.

I invite Colin Imrie to give a short overview of the Scottish Government's progress since officials last appeared before the committee, then I will ask each of the panel members to introduce themselves and say a few words about the situation. We will then have a general discussion.

Colin Imrie (Scottish Government Enterprise, Energy and Tourism Directorate): I will explain briefly what I am doing currently. When I was here before, I appeared in my then capacity as head of the energy consents unit with my colleagues David Wilson, Jane Morgan and David Rennie. We have restructured the energy parts of the enterprise, energy and tourism directorate, and I am now head of the energy markets division, which deals with non-renewables issues and European Union work that I know is of interest to the committee. Jamie Hume has taken on responsibility for renewable energy and the saltire prize. I will speak on behalf of Government officials.

I do not want to go over the issues that Jane Morgan covered when she presented "Energy Policy: An Overview" to the committee, which you discussed in detail with David Wilson; I want briefly to draw attention to issues that have arisen since then, the most important of which is the publication on 6 October of "Making Scotland a leader in green energy: Draft framework for the development and deployment of renewables in Scotland".

The draft renewable energy framework is a comprehensive document that sets out the Scottish Government's proposals to move towards the European Union's target of supplying 20 per cent of energy consumption from renewable sources by 2020. The framework covers a wide range of issues, given that the European targets relate not just to electricity but to heat and transport, which are important. The Government states its intention for Scotland to move towards a position in which 20 per cent of all energy

consumption is supplied by and 50 per cent of electricity generation comes from renewable sources by 2020. The committee discussed the electricity target at the meeting at which officials presented "Energy Policy: An Overview". There is a clear vision to go beyond the 50 per cent target as marine and tidal technologies come on stream from 2020 and to fully realise Scotland's potential, so that it becomes a major exporter of electricity to our neighbours in the south and across the North Sea.

It is clear that progress must also be made in relation to renewable heat. The Government suggests a move towards a position in which 10 to 11 per cent of heating comes from renewable sources in Scotland. That is a significant challenge, given that the current figure is 1 per cent.

On transport, the EU is considering a figure of 10 per cent of energy from renewables. Biofuels will make a contribution, and in the draft framework detailed consideration is given to the significant opportunity that is presented by electric vehicles and electrification in general, given that electricity is a more efficient energy source for transport than fossil fuels are. Indeed, electricity will perhaps become a more efficient source of heating as renewables technology develops.

The draft renewable energy framework is out for consultation until December. It has been issued to complement the United Kingdom's renewable energy strategy consultation document, which was published in the summer. The UK document anticipated that the Scottish Government would produce its own document and made it clear that Scotland has an important role to play in the overall UK delivery of renewable energy, given Scotland's significant potential in onshore wind and other technologies that I mentioned. The framework covers the ground and is an interesting source of information about a range of issues.

I will mention a couple of other issues. First, National Grid has issued to the industry for consultation the Scottish Government's proposals to the Office of Gas and Electricity Markets for transmission charging reform. National Grid is asking the industry throughout the UK what it thinks, and we should know the position by early December.

There is much emphasis on energy efficiency as an important complement to other issues, which presents significant economic opportunities. In the context of my comments on the renewable energy framework I should have mentioned that capitalising on economic opportunities by considering the supply chain and working with the enterprise agencies is a significant element.

Finally, on the European front, Jim Mather was in Norway from 12 to 14 October with a party of academics and industrialists, under the banner of the Scottish European green energy centre. In particular, the group considered co-operation in the fields of carbon capture and storage, where important developments are being made in this country. They also considered co-operation on marine renewables and offshore grids. We have also influenced the EU's strategic energy review, which is published today.

The Convener: Thank you for that, Colin.

I will now get the panellists to introduce themselves and their organisations and say a few brief words. We shall go anticlockwise, just to be perverse.

Alison Kay (National Grid): I am the commercial director for transmission at National Grid, which has many interests in Scotland: it owns and operates the gas transmission network here, and also operates the electricity transmission network, but the assets in Scotland are owned by Scottish and Southern Energy and Scottish Power.

National Grid is working very closely with the UK Government to ensure that the renewables targets that Colin Imrie has just been through can be achieved by 2020. Scotland has a key part to play in achieving the UK and European targets, so National Grid is working hard on access and planning reform and is heavily involved in developing the regulatory framework for the offshore networks. Those are our key priorities to enable the achievement of the renewables targets over the coming years.

Brian Nixon (Scottish Enterprise): I am the director of energy with Scottish Enterprise. Our focus is firmly on the economic development opportunities within energy. We consider and work with the offshore oil and gas industries, the conventional power generation sector and pretty much all types of renewable energy. We regard our role as being to analyse and interpret Government policies, regulations and targets; to match them with the academic and industry strengths of Scotland's universities and industry sectors; and to direct as much effort, investment and resource as we can towards accelerating economic development opportunities or, in some cases, addressing market failure or blockage. That is almost always done in partnership with other public and private sector bodies.

I am keen to participate in the discussion, but stress that our focus is firmly on accelerating the economic development opportunities for Scotland among all the other ambitions.

Nicholas Gubbins (Community Energy Scotland): I am chief executive of Community

Energy Scotland—a new Scottish charity that opened for business in August. Our role is to bring a number of things together at community level to promote confidence, resilience and wealth through sustainable energy development. Thousands of community organisations throughout Scotland, ranging from squash clubs to advanced development trusts, can benefit from renewable energy development and have a role to play in advancing many of the matters that the committee is considering.

At the moment, the community energy sector is poorly developed. It has massive potential and tremendous enthusiasm, but it faces quite formidable obstacles, ranging from a combination of the skills and capability at local level to regulatory and infrastructural obstacles. For example, although we hear a lot about access to the transmission system, one of our critical concerns is access to the distribution network to develop embedded generation throughout Scotland. In many parts of the country, that network is still poorly developed or creaking.

There are a number of issues, but there is also tremendous potential to move the agenda forward at community level.

Dave Watson (Unison Scotland): I am the Scottish organiser with Unison, which is the largest trade union in the energy industry. We represent staff in the electricity and gas industries. Although our members are from right across the industry, the biggest focus is on the supply side—the retail element. We also have a wider interest, particularly in fuel poverty, because we have members in local authorities and the national health service.

We would like the inquiry's main focus to be the need for a balanced energy policy. All the energy trade unions are agreed that we need to generate electricity from a range of sources. Yes, renewables need to be developed, but we also need to remember the importance of other sources, particularly coal. In addition, it is important that any energy inquiry focuses on fuel poverty, particularly in the areas of energy efficiency, tackling low incomes and dealing with the price of fuel.

This morning, you want to focus on governance issues, which is a particular interest of ours. In that regard, we ask you to consider how the industry is regulated. It is important that you examine the way in which the market works—or, as we argue, does not work—in the energy industry, and the need to balance the grid to ensure that balanced sources can be introduced.

09:45

Audrey MacIver (Highlands and Islands Enterprise): I am head of energy within the regional competitiveness group in Highlands and Islands Enterprise. As you know, for the past 40 or 50 years, the Highlands and Islands has had a long association with the oil and gas sector and with hydro power developments. We are convinced that the Highlands and Islands has a pivotal role to play in advancing renewable energy technologies for Scotland and the UK.

Everyone at this table will be aware of the challenges that face us, particularly around access to the grid, charges and supply chain development. Equally important, however, is public acceptance and support for renewable energy. HIE's response in that regard is to think about the economic opportunities that arise from the development of the sector and the ways in which we can capitalise on opportunities for growth in that area. The energy sector is pivotal in the development of Scotland as a globally competitive region.

Robin Presswood (Fife Council): I am business and strategy manager in Fife Council. Next week, we will host a visit from your committee but, unfortunately, I will not be there, as I will be on a pre-booked course. However, my colleague Graham Hatton, who is in the audience, will be there and will introduce you to a number of key employers in Fife.

Fife aims to be Scotland's leading green council. As part of that, we believe that the renewable energy targets that have been set out are eminently achievable. We believe that, within five years, based on current, committed investment by the principal private sector firms in Fife, we can generate the equivalent of Fife's total household electricity consumption from renewable sources, and achieve a reduction of 30 per cent in Fife's greenhouse gas emissions. We believe that that creates considerable economic development opportunities, as Brian Nixon has said, and that more than 1,000 jobs will be created as part of this journey towards a low-carbon economy. The council is excited about working in partnership with the private sector to make progress in that regard.

Rob Hastings (Crown Estate): Through its marine estate, of which I am the director, the Crown Estate has substantial sea bed ownership, which, in today's world, has substantial renewable energy potential. Our objective is to work with the Government to deliver renewable energy aims. We have been busily deploying programmes that will help to achieve those aims.

Our offshore wind programme has three parts. We are delivering a number of round 1 and round 2 offshore programmes, predominantly in England

and Wales. The round 3 programmes have the objective of delivering 25GW of new renewable energy offshore by 2020. The programme is UK-wide, and includes Scottish waters outside the territorial waters limit.

Our Scottish territorial waters programme is currently out to tender. We have had a considerable number of responses, and the indications are that more than 10GW could be produced by the programme. We have initiated a wave and tidal programme that is centred around the Pentland Firth and the surrounding areas, the objective of which is to get 700MW in play by 2020.

We are also quite interested in transmission. We have undertaken a number of studies to prove the technical and commercial viability of having an offshore transmission system that connects the renewable generation sources to the points of demand.

Alongside the renewables programmes, we have a number of other programmes, largely around carbon capture and storage. We are working with the UK Government and the Scottish Government to establish the regulatory framework for CO_2 and natural gas storage around the UK and Scotland. The expectation is that the first pilot project for CO_2 storage will be deployed some time next year, and we will develop a programme to go alongside that.

We have identified a few key issues. For example, there is a need for clarity around targets and the energy mix. Essentially, that is a matter of policy. That clarity is needed for investor confidence, as the projects are highly speculative and technically complex. Further challenges include issues around the transmission of renewable energy—which we are particularly interested in—challenges around the supply chain, and issues relating to the consenting and regulatory processes.

The Convener: Thank you all for those remarks, and thanks to those of you who submitted written evidence.

I ask members of the committee and the panel to keep their questions and responses brief, so we can cover as much ground as possible. I remind members of the panel that not everyone must respond to every question.

I would like to know a little bit more about the issues relating to the grid, which are crucial in terms of capacity and charging. To what extent is the current state of the grid a barrier to the development of renewable energy, in particular in Scotland? Can you talk about the prospects for investment in the grid, both onshore and offshore, and about the possibility of having interconnectors off the east coast?

Alison Kay: First, I should say a little bit about what we are doing. Perhaps others can come in after that.

We recognise that access needs to be sorted out and that the situation is not perfect. We are doing three things on that front. In the short term, we want to advance the Great Britain queue by helping people who are ready and able to connect—that is, people who have got planning permission for their projects. Accordingly, we have amended our regulatory regime to allow such projects to advance up the queue so that they can connect. We are doing everything that we can in the short term to ensure that the queue is as fluid as possible and that those who are able to connect are allowed to do so. Along with our regulator, we are trying to determine whether there is more to be done in that area. For example, could we make some quick fixes to the regulatory regime that would create more fluidity in the queue?

In the longer term, there are two big issues. We need to use our existing capacity more effectively. I am sure that everybody here has heard of our transmission access review. We have six proposals for modifying access to the system, which I will not talk about in detail today unless you want me to. Those proposals are currently out for consultation, and the aim is that the modifications will be with Ofgem by December. In addition, the auction modification proposal will be with Ofgem in the first week of January, so we are basically on target. We believe that the new system access arrangements will make a big difference in utilising the available capacity more effectively.

We are talking to Ofgem and the Government about strategic investment. At the moment, we cannot invest until we have a firm commitment from a user that they are able to connect to the grid. Given the current planning regime, that means that there can be a long time between when a project wishes to connect to the grid and achieving that connection.

Some of the Scottish and UK Governments' planning reforms will help to shorten the planning process, but we are, above all, examining the possibility of being allowed to invest ahead of receiving a signal of a wish to connect. Ofgem will consult on that early in the new year. It would mean that in areas of the country where we knew there would be significant investment we could go ahead and reinforce or build new transmission infrastructure before receiving a signal. That would help to alleviate the problems.

Access needs to be sorted, and we are doing many things to help. I hope that, in the short term, people will begin to see improvements in grid access.

Dave Watson: The primary issue is the need to strengthen the grid. Capacity is also a concern, and if the committee hears about only one thing—I know that it has heard about this in evidence sessions—it should be the Beauly to Denny link, which everyone will tell you is crucial to the development of renewable energy. The issue is not only that particular cable, but what runs off it. However grandiose some of the other schemes—such as subsea cables—they should only be complementary to strengthening the Beauly to Denny link. I hope that that point is understood.

There is a new planning framework. Unison represents planning officers in Scotland, and the committee ought to be aware that there is a national shortage of planning officers, which is a difficulty. The previous Government developed a programme, but it has gone a little quiet at the moment, and there is still a national shortage. There is a shortage of training for planners, and when they are put in place they are poached by the private sector and given much better pay and conditions than they would get if they worked for local government.

National Grid gets a lot of grief about access to the grid, but, in fairness, it is only an operator, like Scottish Power and Scottish and Southern Energy in Scotland: they maintain the system. The issue is regulatory rules. National Grid and other firms essentially receive money to do what they have agreed with the regulator, so we need to focus on Ofgem's role. There is an issue with regard to access charges—we argue that some of them are discriminatory to Scotland and to some renewable energy operators, particularly in the far north.

I ask the committee not to lose sight of the issue of transmission loss. Ofgem keeps coming back with its proposal, but if it was implemented, it would mean further discrimination against the Scottish energy industry, and it would almost certainly end the industry's ability to export and the real economic benefits that it provides in terms of job numbers and job quality in Scotland.

Finally, there are issues to do with the regulator, the industry and long-term planning. The regulator's view is that the market will solve everything. The biggest provider of renewable energy in Scotland has historically been hydroelectric power. We should ask ourselves if we would have the hydro capacity that we currently have in Scotland if we had relied on market mechanisms. The hydro system was put in place by a visionary politician called Tom Johnston. Were it not for his vision in driving it forward, we would not have even half of the current hydro capacity—we would probably have a quarter. We ought, perhaps, to return to that model.

The Convener: Do any other panellists wish to comment on that point?

10:00

Rob Hastings: We are seeing a wholesale shift in the energy mix and we need to consider how to respond to it. At a fundamental level, the simple issue that we face is that there is a vast renewable energy resource in the north and the majority of the consumption is in the south. The fundamental problem is that the regulator is bound by two simple things—it must protect the consumer in terms of costs today and costs in future. The bit that is missing is the recognition that speculative investment is required to meet our objective of getting to the new energy mix that we seek for 2020, if we take that as the time horizon. The regulator is unable to allow speculative investments of the nature and scale that are required to deploy the programmes that we need today. We must concentrate effort on understanding that a risk distribution is required that is not allowable under the current system. In other words, at some point, consumers will have to take a risk with the projected energy mix that they believe in and accept that we need investment in a transmission system to support it.

Audrey MacIver: We recognise that we have a time-limited opportunity to secure the maximum economic benefit from developing the renewables sector here. We could meet the targets in 2020, but with large-scale deployment of devices that have been manufactured elsewhere. In the intervening time, we must assure investors and manufacturing companies that a route to market is imminent and will appear within the timeframe of the target. We must demonstrate fairly radical changes, which involves working with the regulators on more near-term solutions for the grid and encouraging the work that is being progressed through the transmission access review, which Alison Kay mentioned. We must demonstrate to investors that we are making progress in the right direction so that we encourage them to remain in Scotland and to be committed to manufacturing and deploying devices here. Highlands and Islands Enterprise is also considering short-term solutions for high-energy end users and a more short-term route to market for developers. It is critical that we crack the issue so that we secure the maximum economic benefit for the country.

Colin Imrie: Earlier, I mentioned transmission charging. The Scottish input was provided in conjunction with a group from Scottish industry. That is only one of the things that we are doing. Grid reinforcement is clearly important to the development of our energy industry as a whole, not just the renewables sector. The draft national planning framework clearly recognises not only the importance of grid reinforcement in the north, but the importance of using existing infrastructure to deal with the future thermal applications, developments and investments that we expect.

It is worth mentioning the opportunities that are being considered in connection with smart grid management. A project is under way in Orkney to manage production and demand much more efficiently, to allow more of those into the Orkney system. That is being carried out by a partnership of bodies, including the University of Strathclyde, SSE and National Grid. That approach chimes with Alison Kay's comments about the importance of working together. The importance of working together is one of the reasons why we have reorganised internally and created a new team in my new division that will deal with transmission issues.

Brian Nixon: I will mention another aspect of grid reinforcement that I hope is of interest. Scottish Enterprise is making progress on the development of a power networks test-and-demonstration facility. We also have to develop the capability to manage safely the transmission and distribution of small and variable amounts of distributed electricity from remote locations and to feed that electricity into the grid safely and effectively. The facility will allow academics and industrialists to test and demonstrate their products, devices and systems in a live-load grid situation. We hope that the project, which was approved yesterday by our executive board and faces the final hurdle of approval by the main Scottish Enterprise board at the end of the month, will now move forward, as it will provide significant opportunities not only to help grid management but to grow our businesses.

Dave Thompson (Highlands and Islands) (SNP): The issue of transmission charging is obviously very important. However, I was interested in Highlands and Islands Enterprise's comment in its submission that it might contravene EU directive 2001/77/EC, on the promotion of fair transmission charging, and that although renewable energy represented 2 per cent of capacity it contributed 16 per cent of charging. Although that might not be a huge percentage of the cost, it is having a detrimental effect. Of course, it is not within our gift to deal with that issue; it is up to Ofgem and Government direction.

Similarly, Unison says in its submission that the

"primary emphasis on competition is damaging"

renewables. Again, Ofgem's remit seems to be the problem. Perhaps HIE and Unison will expand on those two points.

The Convener: We had hoped that Ofgem would be able to attend today's meeting, but no one from the organisation could make it. However, its representatives will appear at a future meeting, so we will be able to put points directly to them.

Audrey MacIver: The transmission charging methodology discriminates against the developers and generators furthest away from the population centres. We contest such discrimination and believe that it contravenes the EU directive. In that respect, we have been working with the Scottish Government on proposing alternative charging methodology.

Earlier this year, the Highlands and Islands transmission working group, which is chaired by HIE and involves National Grid, Ofgem, our local authorities and the Scottish Government, commissioned a report on fuel poverty in relation to transmission charging. That report, which I believe has been submitted as evidence, concluded that transmission charging constitutes only 4 per cent of the overall electricity bill, which somewhat weakens the argument with regard to its effect on the end consumer. We have been trying to supply the evidence required to have that discussion with Ofgem.

Dave Watson: Dave Thompson makes the fair point that Ofgem's remit is very much about promoting competition, although in fairness to the organisation I point out that that remit is set out in various pieces of legislation and directions that it receives. For reasons that I indicated earlier, taking that kind of market approach in the energy industry will require much more planned and structured development. Although the current reviews have very worthy aims, even the transmission access review is very long term. The issue is urgent; the clock is ticking. Our nuclear power and coal power stations are being run down, and we need to get new generation capacity in place very quickly.

The problem with Ofgem's market-led arrangement is that its view that energy generation should be as near as possible to the population centres that use most of the power leads inevitably to the conclusion that the north of Scotland is the last place in the UK where electricity should be generated. In fact, as I explained to Ofgem earlier this year, if it followed that argument through, it would end up locating most of the big power stations in the home counties—which, I have to say, the local MPs might not be so enthusiastic about. I do not think that Berkshire is quite ready for big coal-fired power stations.

Interestingly, the latest argument, particularly with regard to transmission loss, is that all this is an environmental initiative. As a result, Ofgem would counter Audrey MacIver's point about the EU directive by stressing the environmental perspective and suggesting that some of the electricity gets lost from the cables as it moves from the north into the population centres. Frankly, that piece of nonsense has been dreamed up to take people's focus away from the market-led arrangement that Ofgem is driving. In short, because of their focus on price and competition,

regulators such as Ofgem tend to be driven by the economics of the market.

Dave Thompson: Are you saying that Ofgem's remit would need to be changed, because it is simply doing what it has been asked to do?

Dave Watson: Absolutely. I am sure that when Charles Gallacher from Ofgem comes before the committee he will tell you, "It's not me, guv; Government has given us this remit and direction." I think that he will be right to say so.

Dave Thompson: So we need to lobby the Westminster Government, because it controls Ofgem's remit.

Dave Watson: Indeed. It is a Westminster issue.

The Convener: We might well decide that when we come to the end of our inquiry, but it is too early to reach such a conclusion.

Colin Imrie: The interpretation of the EU directive is very interesting in that context. However, the transmission charging rules—and the locational element of such charging, which is encouraging the development of power stations close to consumers in the south-east of England—were set in the 1990s, when the energy structure was very different. From our work with the UK Government, Ofgem and the other bodies concerned we know that there has been a strong recognition that the situation has changed radically. Indeed, that has been made clear in the UK Government's renewable energy strategy. Looking at ways of amending the remit is on the agenda; we are making those points and the committee's input would be very valuable.

Moreover, Ofgem's probe into whether the market's competitive structure benefits consumers will examine how a market set-up that was established in very different circumstances in the 1990s, when people assumed that fuel supplies were not a problem, can be used in the fundamentally different situation in which we find ourselves in the first decade of the 21st century. The probe will be completed at the end of the month and we will discuss it with Ofgem on 21 November.

Lewis Macdonald (Aberdeen Central) (Lab): Dave Watson said that the one thing that the committee had to hear was the importance of the Beauly to Denny power line. On that issue, I have two questions, both of which are directed at Alison Kay and Rob Hastings. In an answer that I received last week to a parliamentary question, the Minister for Enterprise, Energy and Tourism said that 13 renewables projects in the north of Scotland were awaiting connection not because of the charging regimes but because of physical access and the availability of the grid to carry the power to market. If the project is approved, what will be done to link in the Northern Isles, the Western Isles and the north-east of Scotland to the grid and stimulate greater capacity for carrying renewable energy to market from those regions? Secondly, if the power line is not approved, will any of those opportunities still be available to Scotland or will the potential for the north simply be wiped out?

Alison Kay: As others have said, the Beauly to Denny power line is an absolute prerequisite in every scenario that we have considered. At the moment, quite a few renewable projects in the north of Scotland have been held up, although I am not quite sure of the number of megawatts—

Lewis Macdonald: Thirteen projects are involved.

Alison Kay: Those projects have been held up behind the consideration of planning permission for the power line and will be released as a result of that decision. Our understanding is that renewables projects are not being connected not because of the transmission charging system, but because of what is happening with the planning permission for the Beauly to Denny power line.

Colin Imrie referred to the study that we are conducting with Scottish companies to find out what else is needed to meet the UK Government and Scottish Government targets. Reinforcements that I believe already exist in your national planning framework statements will be needed to bring power down from the Highlands and Islands, and we are considering other methods, including the use of subsea cables and other onshore reinforcements, of realising the full potential of offshore and onshore renewable energy in Scotland and exporting that power further south into other parts of the UK. Therefore, there is a lot behind the Beauly to Denny power line, but it is a prerequisite to shifting some of the backlog and queue that I have referred to.

10:15

Lewis Macdonald: Do the subsea cables depend on the Beauly to Denny line being set up first?

Alison Kay: The final report from the three transmission operators is not due until January, but an interim report that was delivered to the electricity network steering group in October suggested that the west coast subsea cable was absolutely necessary. I stress that the report has not yet been concluded, but it looks as if Beauly to Denny, plus the other reinforcements in the national policy framework and something down the west coast, will be needed to transmit the renewable energy to meet the renewables targets.

Rob Hastings: I do not have much to add to that. However, I can say that, even if Beauly to Denny was operating, it would be insufficient to deal with the capacities that we are looking at in our wave and tidal programme in the Pentland Firth. We set ourselves an objective of 1,000MW by 2020, but virtually none of that is connectable without something in addition to the Beauly to Denny line.

To make some rational sense of why we would explore the development of large-scale wave and tidal programmes in the north, we needed to provide some substantiation on how we would connect it. That is precisely why we conducted offshore transmission studies. We are talking not about local district network operator connections, but about taking bulk power from the north to the south through an infrastructural programme.

Let me pick up on one point in the discussion of Ofgem's remit and whether it needs to be changed. We have worked with Ofgem closely on offshore transmission for a round 3 programme—a 25GW, large-scale programme, which will require infrastructural investment in the transmission system. That again links to the bulk power discussion. We have discovered that Ofgem's remit does not necessarily need to be changed, but that the interpretation of the existing remit needs to be clarified.

Through discussion with Ofgem, we have found that its remit is centred on cost reflectivity to the consumer. In other words, the consumer pays for the cost of connecting any generator. We know that the energy mix for 2020 will be different from today. In order to protect the consumer from future electricity costs—the combination of the costs of generation plus the connection—consideration must be given to connection. Ofgem now better understands both the issue and how it can interpret its remit to do that. By taking a strategic approach to infrastructure investment, which we are now doing with Ofgem, we are starting to unlock how we can make speculative investments in infrastructure that do not infringe its mandate. The more constructive conversation with Ofgem is about how to interpret its mandate.

Colin Imrie: I mentioned the national planning framework and the importance of grid infrastructure in that context, including interconnection to the islands and the value of subsea grids. As members probably know, the application for Beauly to Denny and the process of consideration predated the national planning framework. The question of the need for Beauly to Denny, as well as its environmental and other implications, has been considered at length in the inquiry, which is still with the Scottish Government directorate for planning and environmental appeals. It is currently preparing its report, and it will be next year before ministers have a chance to consider it. However, the importance of the issues surrounding Beauly to Denny is fully recognised.

Rob Gibson (Highlands and Islands) (SNP): Audrey MacIver suggested that public acceptance of the real opportunities in renewable energy was an important facet of the debate. In that context, we can see a lightening of opinion in the Highlands on wind farms through several co-operatives, which are becoming oversubscribed.

In addition, the huge Viking project in Shetland could provide more than 500MW, which it needs to be able to feed in through the grids that have been mentioned, which have not yet been built. Would it be acceptable for Scotland to contribute a considerable amount of money to such initiatives to the benefit of communities, just as many small communities in Norway benefit from the provision of hydro power to that country's national grid?

The Convener: Nicholas Gubbins should probably go first on that question.

Nicholas Gubbins: The potential is there but, as I said, there are formidable challenges to overcome. For example, over the past few years, the community in Melness, which is on the far north of the Scottish mainland, in north-west Sutherland, has, with our help, been developing a community wind farm project. It is one of the few remaining communities on mainland Scotland that still has a single-phase electrical supply. In other words, the quality of its electrical supply is extremely poor, as a result of a substandard distribution network. It is quite ironic that we talk about the huge potential of subsea cables and so on in the Pentland Firth, when the poor quality of the distribution network means that parts of Scotland still do not have a basic quality of electrical supply.

The Melness project is scaled at about 2.5MW, which is tiny in comparison with many of the projects that have been mentioned, but it still represents a significant way of bringing economic benefit to that part of Scotland, which is dying because of factors such as the age distribution of the population and lack of development. The cost of connecting that small wind project to the grid via the distribution network is about £1.8 million; the project has to carry the cost of upgrading the distribution network so that it can connect to the transmission system. That illustrates what I said earlier. When it comes to improving generation throughout Scotland, the quality of the distribution network is a major issue. If we are to maximise opportunities for communities on the scale that Rob Gibson is talking about, we must tackle the distribution network, too.

Dave Watson: On communities, you will not be surprised to learn that we in the trade unions view

the provision of jobs as an extremely important issue. A while ago, Scottish Enterprise produced a report that suggested that some 36,000 jobs could be created in the supply chain for the renewables industry but, as Audrey MacIver said, we have not seen much evidence of that. If anything, my colleagues in the manufacturing unions would say that the number of jobs that has been delivered in the renewables industry has been nothing like what was hoped for or expected, particularly when we compare that figure with the number of jobs that are provided in conventional power stations—not just in the stations themselves, but in transmission and distribution—and, importantly, in the big manufacturing companies in Scotland that have expertise in the field, most of which gets used abroad rather than in the UK. Those are big issues.

We must examine feed-in tariffs, about which there is a lot of controversy. The power industry is not too keen on them, as I am sure Ian Marchant and his colleagues will tell you when you take evidence from them, but if we look elsewhere, we find that there is merit in considering how we could develop such a system, particularly for small-scale generation and microgeneration. Other infrastructure changes, such as smart metering, will be required, but feed-in tariffs must be given careful consideration.

Rob Gibson: In the context of connection and competition, the cost of linking Melness to the grid was mentioned, but the raw material costs nothing, which is not the case with certain other major sources of power. Why does that not figure in the process of deciding which energy projects should be used to provide fuel security in Britain?

Dave Watson: That is a very good point. We produced a report on the issue, a copy of which I will send to the clerks. Historically, the focus has been on power companies' profits—that is where the windfall tax argument comes in—but we did a different study. We asked industry specialists to examine the industry as a whole. We also asked them to find out what households were paying for electricity.

Over the three-year study period, the cost of gas and electricity across the UK went up by 60 per cent—by about £8.2 billion. We then asked the specialists to consider the costs to the industry and the wholesale costs in particular—the costs of the raw materials, as Rob Gibson describes them. The figure was £5.9 billion. Suddenly we saw a big gap of about £2.5 billion, which we described at the time as a "golden hole" in the industry.

Either Colin Imrie or Rob Gibson mentioned the Ofgem review and study. Ofgem ducked the issue entirely. It gave no proper explanation of the gap between the costs of raw materials and the price that people were paying. The money is certainly not going to the transmission operators—as I am sure Alison Kay will tell you.

A lot comes down to the way in which the market operates. Games are played between the power companies before power goes on to the grid. When the committee goes on its fact-finding visit to Kirkintilloch, I suggest that members talk to staff about the games that they have to play. I also suggest that members have a look at some of the market-trading departments within Scottish Power, Scottish and Southern Energy, and the other power companies, to see how they interact with the grid. Members should ask to be shown the games that are played with price spikes throughout the day. Members will then understand the importance to Scotland of the balance between base-load generation and flexible generation. I am thinking in particular of Longannet, which lets Scottish Power switch on and off its units within the power station—which really contains several power stations. It is well beyond our experience to work out the actual costs, but it seems to us that part of the solution lies in dealing with the silly-game market.

Markets for consumables involve complex mechanisms that economists have written many tomes about. Ofgem is trying to get a kid-on market; it is trying to replicate mechanisms of real markets. To be frank, that does not seem to be working. I do not think that it is doable. Ofgem will always be behind the game of the clever players who play the market for profits.

Rob Hastings: There are two issues to consider: the first is embedded, small-scale generation within small communities, offering a secure and good-quality supply; and the second is large-scale industrialisation, centred on new renewables technology—wind, wave or tidal. We have concentrated on large-scale industrialisation, because that is largely where the jobs come from.

The market pull required to draw in the investor community—to take the technology risk as owner-operators, or to take the development risk for the technology itself—must be strong. Signals have to come from policy. Targets have to be ambitious but they also have to be deliverable to get everyone behind them. That is why we want to get 1,000MW of wave and tidal power in the Pentland Firth, which would be the biggest programme of its type in the world. No one has contemplated work on that scale before.

If you can achieve 1,000MW by 2020, you will be on a trajectory that may get you to 10GW by 2030 or 2040. That would give you sufficient pull to get the investor community in. It is the investor community that will create the jobs. You have to give clear signals on the policy objectives and on the energy mix requirement.

Dave Thompson: Rob Hastings mentioned all the jobs in the big industrial set-ups, but I wanted to ask Nicholas Gubbins about the local, embedded, community renewables set-ups. How many jobs could be created through having a lot of small-scale set-ups of that type? In your submission, you mention the complicated regulatory regime. You say that the regime is not proportionate and is making it difficult for community projects to go ahead, and you suggest that the definition of permitted developments should be expanded.

10:30

Nicholas Gubbins: At the smaller scale, we are faced with not a few large developments but the potential for thousands of small ones. Although we have not done a study of the jobs potential as such, the jobs that would be developed would be largely at the local level, which could have a significant influence on local economies. As an ancillary to that, major issues for the supply chain for skills, installation and equipment have to be addressed. We are trying to do that on a small scale by supporting training facilities—at Inverness College, for example—to help people reach the stage at which they can start to provide the expert skills and compete to deliver the projects.

It would be necessary to expand the jobs that would accrue from, say, a single wind farm project or a small-scale district heating scheme in Oban or wherever, which would be a handful, across all communities in Scotland in which the potential would arise. The scope is significant, but it will be built from the bottom upwards, brick by brick, rather than in a big, high-investment hit. It is important that the two models work hand in hand.

The other side of the coin is that the smaller-scale community wind farm projects to which I referred are almost always less than 5MW in size, so they obviously do not have the same economies of scale as the larger projects have. The regulatory costs for small-scale projects that accrue from, for example, connection costs are disproportionate to the profits that the projects will generate. The small projects will suffer disproportionately because of transmission charging changes and so on; that is of particular concern.

The Convener: I have been advised that Colin Imrie has to leave at about 10.45 because of another commitment that has arisen. Does any member have a question that is specifically for Colin?

Gavin Brown (Lothians) (Con): What importance do the witnesses—in particular, those from the Scottish Government and the enterprise agencies—attach to the fact that Scotland is a net exporter of energy?

Colin Imrie: Export is fundamental to the long-term vision for Scottish energy. As I understand the market that Dave Watson described, the exports just now come largely from coal. However, the long-term aim, which is set out in detail in the renewables framework, is that Scotland should export its renewables potential. The current grid reinforcements and subsea grids are critical in that regard. By 2020, Scotland will certainly export energy, if the mix of renewable and thermal generation that we believe is required comes along. That is certainly what the United Kingdom Government expects in its renewable energy strategy. In the longer term, from 2030 to 2040, the exports of Scottish energy production could be very significant indeed. We could be talking about exporting something like three or four times our Scottish consumption to England and countries further afield, if the grid ideas that have been discussed come off.

Audrey MacIver: The industry is in its early stages and we are looking to harness as much of the intellectual property as we can, particularly on wave and tidal energy. As well as exporting the power, therefore, it is important that we do what we currently do through the oil and gas market, which is to export the skills, expertise and knowledge, which have a longer-term, sustainable economic benefit for the country. We are looking at exporting in that way as well as exporting power. As I said, the situation is time limited and we need to give out the right signals to encourage investor confidence and encourage the local manufacturing base to develop skills and work with our academic institutions.

The Convener: Does Brian Nixon want to add anything from a Scottish Enterprise perspective?

Brian Nixon: I back up Audrey MacIver's stance. In truth, the ability to export electricity is less important to us; what is important is that that export indicates that we have a healthy, vibrant industry. That leads to industry confidence, the growth of industry supply chains and their strength, and the ability to import techniques. The fact that that market stimulus is there is right and proper, but the actual trading of electricity is less important to the enterprise agencies.

Ms Wendy Alexander (Paisley North) (Lab): I have a small point of clarification for Alison Kay and Colin Imrie. We have talked about the historical difficulties of planning consents and how they are being addressed. National Grid's submission says:

"National Grid fully supports the aims of Scottish planning reform process and would urge the Scottish Government to continue down the path of adopting planning reforms contained in the Westminster Planning Bill proposed for England and Wales."

I would like some more detail about that, and about whether Colin Imrie and his team have had a chance to look at the Westminster bill to see whether any further developments are appropriate.

Has it now been agreed that grid reinforcements to support renewable energy developments will be in the list of designated national developments in the national planning framework?

Colin Imrie: Some of the planning reforms that are under way at Westminster were anticipated by the Planning etc (Scotland) Bill in 2006. Therefore, the Scottish equivalent of the idea of an infrastructure planning commission is already being taken forward through the national planning framework, given its legal basis.

On renewable energy, Scottish planning policy 6 sets out a clear framework for progress, which is being implemented in the form of locational guidance at the local level. During the past 18 months to two years, the Scottish Government has made significant reforms to the way in which it implements its decision making on consents—we discussed that at a previous committee meeting.

There are important issues around the Planning Bill, one of which is that in England and Wales, which will be covered by the infrastructure planning commission, reforms will be made to the section 36 process, although that will stay as it is for Scotland. The area is executively devolved to Scottish ministers, but the Planning Bill remains Westminster legislation. Improvements could be made to that process—many improvements have been made without legislative change, but some legislative change might be required, and the Scottish and UK Governments are discussing that.

Alison Kay: I back up everything that Colin Imrie said. The statement in our submission has perhaps been slightly overtaken by events, but we certainly welcome all the Scottish Government's planning reforms, and we are happy that the Scottish Government undertook that work before the UK Government did. The reforms seem to be going in the right direction. Infrastructure is in the national policy framework and we are happy that the Scottish Government is taking a lead.

Colin Imrie mentioned section 36 consents, and we were anxious when we wrote our submission because, as I said earlier, it will be key that the planning applications for a generator and any associated infrastructure, reinforcement or build are taken together. It is really necessary to shorten the length of time that it takes to get projects up and on to the grid. That is now happening, and we are happy with the progress that the Scottish Government has made on planning legislation.

The Convener: Does Colin Imrie have any indication of when the national planning framework is likely to be published? Can we get an assurance that the Parliament will be given a full and proper opportunity to scrutinise it?

Colin Imrie: I understand that it was to be published this year. The consultation is, of course, complete.

The Convener: The year is running out and we do not want to run into the usual problem of consultations going on over a recess, thereby limiting the time that Parliament has to scrutinise them properly. I hope that the Government can take that point on board.

Lewis Macdonald: I thank Colin Imrie and Brian Nixon in particular for their evidence thus far. The offshore oil and gas industry has been seen as one of the sectors that gave Scotland great competitive advantage in developing renewables. In the middle of this decade, we saw positive signs with service companies moving from oil and gas into renewables. However, there have been recent counter indications, with companies such as AMEC and Total pulling out of wind and returning to their focus on oil and gas, although one can understand the short-term economic reasons for doing that. Do the Scottish Government and Scottish Enterprise view that as individual companies taking individual decisions, or are they concerned about the impact that those decisions might have on Scotland's capacity to use oil and gas as a platform for renewables? I am thinking in particular of offshore wind production.

Colin Imrie: Brian Nixon knows far more about the detail of the industry than I do. Before I hand over to him, I will say something about "The Government Economic Strategy", in which energy is identified as a key sector. Clearly, the Government recognises the tremendous opportunities to build on the strengths of the oil and gas sector. In particular, it is encouraging moves into the offshore renewables sector, in which Scotland has world strengths, including in the construction of platforms in difficult maritime conditions. The Government is supporting that work. Indeed, it was a theme of Jim Mather's visit to Norway, of which Brian Nixon was part.

Brian Nixon: I thank Lewis Macdonald for that question, which is on a significant issue. Scottish Enterprise has an on-going series of initiatives to address the issue. The simple fact of the matter is that our oil and gas companies are so active in their domestic market at the moment that few are positively making the transition into wet renewables, as we call them, or are positioning themselves and undertaking research.

Significant stimulation and encouragement are therefore required, and we have a number of initiatives under way in that respect. For example, we have piloted what we call a collaborative technology programme under which we

specifically targeted oil and gas companies that had key technologies and funded their contribution to renewable energy device developers to transfer the technology and give the renewable energy people a leg up. We need to stop reinventing things that those of us in the oil and gas sector learned years ago. That pilot project proved to be successful, and we hope to put it on to a more commercial scale. We took a proactive approach: in effect, we were encouraging, handholding and—ultimately—funding companies.

We also work with the main trade associations. Last week, Scottish Renewables held a marine energy event somewhat on our behalf, the focus of which was on bringing together renewable energy companies and oil and gas companies. We wanted to stimulate and foster an awareness of the opportunities and to enable the networking that allows much more to happen.

At the other end of the scale, Scottish Enterprise is positively contributing to and investing in developments such as Fife energy park. Also, in places such as Peterhead, where there are pools of oil and gas skills and expertise, we are working positively with companies to transfer skills into the fabrication, installation and load-out of offshore wind, tidal and wave devices.

A lot of effort is under way, but continued effort is required. The high level of activity in oil and gas means that there is some reluctance to go down the renewables route.

Lewis Macdonald: Perhaps further stimulus is required from Government if we are to achieve that transition.

Brian Nixon: Absolutely.

The Convener: Colin Imrie has to leave early. I thank him for his evidence to committee this morning. I am sure that we will see him again during the inquiry.

Colin Imrie: I am grateful to you, convener.

10:45

The Convener: Does Robin Presswood wish to say something about what is happening in Fife, in relation to Fife energy park and so on?

Robin Presswood: I will not concentrate on the energy park or the other infrastructure work that we are doing, as we have a number of projects. The energy park is a joint project, in which we are supporting Scottish Enterprise. We are also promoting Westfield as a future green business park, which would allow for substantial green energy power generation.

The Fife landscape is quite different from the areas on which the discussion has focused so far. We have discussed the new technologies of wind, tidal and wave power generation and community-based activity, but the Fife renewable energy scene is predominantly industrial and urban. I spoke earlier about the potential to achieve a 30 per cent reduction in greenhouse gas emissions and for renewables to generate 100 per cent of domestic electricity equivalent within five years. That work is principally driven by large private sector employers. Members are aware of Tullis Russell and will visit Diageo on, I think, Monday. Scottish Power is involved in the new biomass plant, and Quaker Oats is involved, too.

Energy costs are very important and the issue must be addressed. The energy costs of one of those companies increased from £6 million to £21 million over three years. The committee should consider our ability to support those major employers in changing their energy mix to a more renewable solution.

Members are aware of the Scottish manufacturing advisory service and the quality of its work in supporting the manufacturing sector. It would be helpful to adopt an approach that targets all the major employers in Scotland. It would be useful if the committee could pick up that issue and explore how rapidly we as a country can move towards carbon capture and storage. The committee has received evidence from Doosan Babcock about that important issue. It would be particularly useful if the committee could address how quickly we can achieve carbon capture and storage for the major energy users in the country.

The Convener: Thank you. That was very helpful.

Christopher Harvie (Mid Scotland and Fife) (SNP): I have three linked questions that are based on the section of National Grid's written submission on the role of renewable heat and transport. Paragraph 42 begins:

"Domestic and commercial heating accounts for nearly 50% of the UK's total emissions."

Can you split that, even roughly, between commercial heating and domestic heating?

Alison Kay: Not personally, I am afraid. However, I can come back to the committee with the figure. I will let the clerk know what it is.

Christopher Harvie: We know about passive houses in Germany, which require no heating input at all, as they are so effectively insulated. In considering the mix of skills and supply-side factors, is efficient insulation a better option? The required work could employ people locally and would use not very advanced levels of skill, rather than attempting to replicate what happened with North Sea oil. When North Sea oil—which I know a bit about, having written what is really the only book on it so far—was first exploited in the 1970s

and 1980s, our manufacturing quotient was something like 30 per cent of gross domestic product. It might be about 14 per cent now, but that is being generous. There are problems there, which we have already discussed in the context of overcoming skills shortages. Would it not be better to consider means whereby heat loss can be avoided?

Paragraph 44 of National Grid's evidence deals with methane emissions. Studies of supermarkets, particularly very large ones, have argued that 45 per cent of the food that we buy is wasted. In other words, that food will, at some point, form part of the methane chain. Can we be complacent about the costs of those enormous supermarket buildings, with their lighting, heating and refrigeration, with regard to likely energy use in future?

Robin Presswood: I will reply to a few of those points from a Fife perspective. On the industrial, commercial and domestic mix, about 50 per cent of greenhouse gas emissions will be industrial/commercial. That is why I am very much focused on that sector. Domestic use will account for about a third of emissions and the remainder will come from transport and land use.

Mr Harvie made an important point about retrofitting the existing housing stock. Fife has done a tremendous amount of work on that during the past 10 years. We invested £48 million in the council's housing stock to reduce energy consumption, and there has been a reduction in emissions of about 400,000 tonnes of CO_2 since 1997. The crucial point is that that work has helped to create around 1,800 jobs during those 10 years, which endorses Mr Harvie's point.

In a number of pilot projects, local authorities are capping landfill sites to prevent methane gas from escaping and are then using the methane to generate electricity. There are two such projects in Fife and there are a number of projects elsewhere in the country.

Alison Kay: We see how energy efficiency measures such as insulation and the use of smart meters reduce demand in the home. In any of the scenarios that we have developed to meet the targets, I stress that a complete change in how consumers operate in relation to heat, transport and energy use is key. I have talked mostly about the contribution that renewable electricity can make towards achieving the targets, but we have also done much work on the heat and transport sector. I could not agree more that energy efficiency measures such as insulation and retrofitting will be key if we are to meet the targets.

Brian Nixon: I think we all agree that that has to happen. However, the International Energy Agency prepared a wonderful slide that shows how Europe could meet its carbon reduction targets by 2050. The overall carbon reduction is made up of wedges, of which the energy efficiency wedge is one of about 10 or 12 that contribute to the total. It is important that we take energy efficiency seriously, but all 10 or 12 wedges will be needed if we are to achieve the targets.

The Convener: The witnesses might not feel able to comment on this. The Government has brought forward £100 million—£30 million in this year and £70 million in the next years—for affordable housing, as part of its budget and plans to kick-start the economy. Should some of that money be allocated for retrofitting rather than for new houses, given that retrofitting might be quicker to deliver and might deliver greater long-term economic benefits?

Dave Watson: I very much agree. Our discussion is straying into the area of the proposed Scottish climate change bill. Retrofitting is particularly important, not just in housing but in public buildings. In recent years there has been a drive to knock things down and build anew, but we need to focus on refurbishing existing facilities.

In recent years many schemes have done pretty substantial stuff on housing standards in the central belt and our cities, but some energy charities with which we work closely are concerned that schemes have not always reached rural areas, which tend to miss out. In some rural areas there is no access to the gas network, so there is a double whammy. That is important.

The committee should carefully consider the role of the public sector, which can do much. The commercial sector has a clear driver, because there is money to be saved. In a recession, people try to cut costs, and energy costs are an important driver. The public sector needs to lead on energy efficiency, which requires up-front investment to ensure that the longer-term savings can be made and environmental benefits can be realised.

Rob Hastings: I will quickly give a few numbers. The 15 per cent renewable energy target for 2020 to which the UK has subscribed requires something in the region of 40 per cent of electricity to come from renewable sources. That figure is based on the assumption that we can achieve a 30 per cent improvement in efficiency in the built environment, and there is a degree of scepticism about whether we can achieve the 40 per cent figure by 2020 on that basis. Any notion that we can escape a need dramatically to increase the energy efficiency of the built environment is mistaken; it will not be possible to achieve the 15 per cent target by 2020 without doing that.

Marilyn Livingstone (Kirkcaldy) (Lab): We have heard this morning about the importance of infrastructure to Scotland's future energy

developments. Do panel members have any concerns about the impact of the hard time that the construction industry is having, particularly in relation to the significant number of redundancies that have been made across the board? We heard in previous round-table discussions about the flight of the skilled workforce. I am concerned about the impact of the ability of parts of the manufacturing and construction industries to borrow from banks in the present climate. We will need the support of the construction sector if we want to look at retrofitting or to consider a Beauly to Denny power line or new power stations.

What are the panel's views on the loss of the skilled workforce now and in the future? One of the submissions said that many trainers in the construction industry are in their 50s, that we are losing them and that we are unlikely to get them back. Who will train the skilled workforce that we will need if we are to achieve the targets that we have set ourselves? On a separate issue, do you believe that we are making best use of the expertise in Scotland's academic institutions?

The Convener: Does anybody wish to have a go at that? We are all looking at Dave Watson again.

Dave Watson: The job of academic institutions is probably outwith my scope. The construction unions would tell you clearly about the importance that they place on getting big generation projects in place quickly and early. Employers in the construction industry commonly complain that when the work comes along, suddenly they have to get a skilled workforce in place. The key to solving that problem lies in people understanding that we must plan the building of particular projects and get the generation capacity in place; at the same time, the colleges and others can start to get the trained workforce in place. It is no good trying to switch on a skilled workforce with five minutes' notice; things simply do not work that way. We need to plan in advance.

Brian Nixon: I will try to answer Marilyn Livingstone's second question about academic capability. The truth is that Scotland is blessed with very strong energy research and development capabilities in most of our universities. Just recently, we have been instrumental in bringing together that capability in a new partnership called the energy technology partnership, which gathers together 10 of Scotland's universities. Together, they have 250 researchers and about 600 academics and are the strongest pool of energy research capability anywhere in Europe. The strength and capability are absolutely there.

Scotland participates in all the supergen research programmes, which are five-year, multimillion-pound research programmes funded by the European Union and the Engineering and Physical Sciences Research Council. We lead on four of those 10 supergen projects, looking at, for example, wind, marine and tidal energy. We have huge capability and strength, but are we accessing those as much as we could? I would like to think that we are, but I certainly take on board the point that we should never overlook the opportunity to do more.

Audrey MacIver: I will add to Brian Nixon's point about the academic institutions. We view moving forward on renewable energy as a key asset because it will allow the UHI Millennium Institute to develop its research portfolio. We support the UHI to participate in the supergen programme. We have six PhD students—three are based at the Scottish Association for Marine Science and the other three are based at the environmental research institute in Thurso. Therefore, there are examples of our enabling our academic institutions and local research institutes to participate in UK-wide programmes. It is early days—the PhD students are new recruits, but we will work closely with them to get the work feeding into industry.

11:00

We are also looking to support the UHI in establishing a research co-ordination unit for all energy matters. We want to ensure that the activities are co-ordinated because there is a lot of interest in the subject within the collegiate network that forms the UHI, as colleges want to take a lead on certain areas, such as hydrogen in the Western Isles and Shetland.

We recognise the importance of tapping into the research programmes, but it is an on-going process.

Robin Presswood: It is an immensely important area of activity for us. Three projects with a total capital expenditure of around £200 million were announced in Fife during the summer, at Tullis Russell, Diageo and the Scottish Power biomass plant at Longannet. The key challenge for the public authorities is in how we turn that £200 million into opportunities for the local construction sector. Earlier in the year, jointly with Scottish Enterprise, we commissioned a study into not just those investments, but other major public projects such as the Forth crossing, and into the impact of those in terms of the workforce that Fife will need in five, 10 and 15 years. We are planning a series of further discussions, particularly with the Fife colleges and the other major training providers, on how we can re-gear the training capacity to allow us to rise to the challenge.

The £200 million investment in renewable energy projects will help to keep the Fife construction industry afloat at a time when the

housing market there is declining significantly, as it is everywhere else in the country. The massive challenge for us, for Skills Development Scotland, for the colleges and for Scottish Enterprise in Fife is in how we can translate that known substantial commitment into other investment. It is not just a 2008 to 2010 investment; another five, 10 or 15 renewable energy projects are planned, including a potential massive investment at Longannet. Therefore, it will become increasingly important for the public authorities to address the questions that Marilyn Livingstone has raised.

The Convener: I am afraid that time is not on our side, but we have had a very interesting discussion. I have a final, specific question for Rob Hastings. Your written submission, which was submitted some time ago, says that application packs for offshore wind opportunities within Scottish territorial waters would have to be returned by 10 October 2008. Can you give a broad indication of the interest that you have had? Is it looking good or not so good for offshore wind in Scottish territorial waters?

Rob Hastings: It is looking very good. At the outset, it was not clear whether there would be a big take-up. If there had been a poor response, we would have avoided having to undertake a strategic environmental assessment. That was the understanding at the time. In fact, the response has been so great that we are likely to have to undertake such an assessment. Fortunately, we have an SEA on the go at the moment that satisfies the requirements for the round 3 programme, which is the UK programme that we hope to be able to bolt on to. It means that we can pull it forward a little and accelerate; however, there remains quite a lot of work to be done to enable the programme.

In the region of 30 to 40 large companies were interested in participating and, as I said earlier, there is the prospect of 10GW to 14GW. There is quite a lot of work to do in terms of the environmental impact assessments and so on, which will lead to some attrition. Nevertheless, there is the potential for a fairly large-scale programme.

The Convener: Thank you.

Brian Nixon: I would like to issue an invitation to the committee on behalf of Scotland Europa. A sustainable energy week is planned for February, in Brussels, which will bring together a significant number of the renewable and sustainable energy initiatives and energy efficiency initiatives that are happening in Europe. Scotland Europa would be delighted to co-ordinate a visit for the committee. I think that you would learn a significant amount about how other countries are approaching the issues that we have been speaking about this morning.

The Convener: Thank you. I am sure that that will be of interest to the committee. We will be considering further visits and fact finding after the Christmas recess, and we are considering going to Brussels to talk to the European Commission anyway. That might tie in nicely with our visit, so we will certainly follow that up.

I thank all the witnesses for their contributions this morning. It has been an interesting round-table session that has set some useful pointers for the committee's inquiry.

Next Tuesday, the committee will visit Fife to look at projects in various locations from Longannet to Methil. I am sure that it will be an interesting day. We will not quite reach my constituency, but never mind. Our next round-table discussion will be in two weeks' time.

11:05

Meeting continued in private until 12:40.

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