

# **ENTERPRISE AND CULTURE COMMITTEE**

Tuesday 30 March 2004  
(*Afternoon*)

Session 2

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# CONTENTS

Tuesday 30 March 2004

	Col.
RENEWABLE ENERGY INQUIRY .....	803
BROADBAND INQUIRY .....	844
PROCEDURES COMMITTEE INQUIRY .....	850

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## ENTERPRISE AND CULTURE COMMITTEE 11<sup>th</sup> Meeting 2004, Session 2

### CONVENER

\*Alasdair Morgan (South of Scotland) (SNP)

### DEPUTY CONVENER

\*Mike Watson (Glasgow Cathcart) (Lab)

### COMMITTEE MEMBERS

\*Brian Adam (Aberdeen North) (SNP)  
\*Mr Richard Baker (North East Scotland) (Lab)  
\*Chris Ballance (South of Scotland) (Green)  
\*Susan Deacon (Edinburgh East and Musselburgh) (Lab)  
\*Murdo Fraser (Mid Scotland and Fife) (Con)  
\*Christine May (Central Fife) (Lab)  
\*Mr Jamie Stone (Caithness, Sutherland and Easter Ross) (LD)

### COMMITTEE SUBSTITUTES

Mark Ballard (Lothians) (Green)  
Rhona Brankin (Midlothian) (Lab)  
Mr David Davidson (North East Scotland) (Con)  
Fiona Hyslop (Lothians) (SNP)  
George Lyon (Argyll and Bute) (LD)

\*attended

### THE FOLLOWING ALSO ATTENDED:

Sarah Boyack (Edinburgh Central) (Lab)

### THE FOLLOWING GAVE EVIDENCE:

William Gillett (European Commission)  
Mr Alan Kennedy (Machars Broadband Action Group)  
Lewis Macdonald (Deputy Minister for Enterprise and Lifelong Learning)  
Robin Naysmith (Scottish Executive Enterprise, Transport and Lifelong Learning Department)  
Neil Stewart (Scottish Executive Enterprise, Transport and Lifelong Learning Department)

### CLERK TO THE COMMITTEE

Judith Evans

### ASSISTANT CLERK

Seán Wixted

### LOCATION

The Chamber



## Scottish Parliament

### Enterprise and Culture Committee

*Tuesday 30 March 2004*

*(Afternoon)*

[THE CONVENER *opened the meeting at 14:02*]

### Renewable Energy Inquiry

**The Convener (Alasdair Morgan):** Good afternoon, ladies and gentlemen. Welcome to the 11<sup>th</sup> meeting of the Enterprise and Culture Committee in 2004. The first agenda item is our inquiry into renewable energy in Scotland. We will hear from two panels today, the first of which consists of William Gillett, who is deputy head of unit for new and renewable energy sources in the European Commission's directorate-general for energy and transport.

Will you start by telling us exactly what your unit does and how it fits into such a vast organisation?

**William Gillett (European Commission):** Thank you very much. Good afternoon, ladies and gentlemen. In the directorate-general for energy and transport, we have one directorate that deals with renewables and demand management, or rational use of energy, or energy efficiency—whichever you like to call it.

The unit in which I sit focuses mainly on helping to implement the policies and legislation that are documented in the paper I submitted. We try to do that using the programmes—research and the new intelligent energy programme, which tackles the non-technological barriers to getting renewable energy and energy efficiency into the market. I come more from the direction of trying to get the technology implemented than from a pure policy direction, although my colleagues in the policy unit and I work very closely together. I hope that I will be able to give you information on the technological aspects and on the policy and regulatory aspects.

**The Convener:** Your paper mentions various programmes that the Commission runs that are designed to encourage research and development of renewable energy technologies. Can you give us any examples of how that money filters down to projects? Is any of it in Scotland, or even in the United Kingdom?

**William Gillett:** It certainly does filter down to Scotland and the UK. There are essentially two major programmes. The larger of the two is the

sixth framework programme for research and development. That is spending about €800 million over four years. We in the directorate-general for energy and transport manage about half of that; we manage the near market, which is the demonstration end of the research spectrum. Normally, we support up to approximately 35 per cent of the costs of demonstration projects that promote renewable energy and energy efficiency technologies.

Of particular interest to Scotland would be work on onshore and offshore wind. In the new and on-going revisions of the work programme, we are proposing more support for ocean energies such as wave and tidal—not mainstream tidal, but ocean current technologies. I understand that a new ocean technology laboratory was recently set up in Scotland and we hope that Scotland will come forward with projects in that sort of area.

This year, we have launched a new initiative called Concerto to promote local communities as live laboratories in which energy efficiency and renewables are demonstrated together by a local community trying to become more energy efficient, forward looking and sustainable. It has received a lot of interest throughout Europe. We now expect that, within the next few weeks, we shall be spending about €100 million in support of communities that are trying to proceed with that agenda. I hope that we will learn a lot from that. The main lessons would be on the kind of problems that have to be faced when there is a larger penetration of renewables than there has been in the past, working together with good demand management.

We also recently launched the first call of the intelligent energy programme. In the renewables area, that addresses electricity, heating and cooling, and transport fuels. Groups in different parts of Europe will have the opportunity to work together to tackle issues such as administrative barriers, public awareness and information to installers, and generally to try to make the market work more effectively.

**The Convener:** In relation to the Concerto programme, you said that you are hoping to authorise €100 million in the near future. Have you had any applications from Scotland under that programme?

**William Gillett:** We received 72 proposals and the evaluation process is still going on. I am afraid that what is inside the evaluation bag is still confidential. However, that information will be coming out in the next few weeks and we will be able to say a bit more about it then. We have had a very encouraging response, but I am afraid that we are not yet in a position to say what is inside the evaluation bag.

**The Convener:** Okay, but are you permitted to say from where you have had applications? I am trying to find out whether there is awareness in Scotland of the fact that such programmes are running and, if there is, whether there is the appetite or capability to take up the available opportunities. If there is not, we ought to be concerned about that.

**William Gillett:** I am afraid that I do not have in my head all the data as to which proposals have come through. As I say, we will make public very shortly what has come in. My recollection is that, overall, the UK was quite well represented, but I cannot tell you honestly today which individual communities have applied.

**The Convener:** Perhaps I could phrase my question in another way. Do you have a gut feel for which countries are in the forefront of research into new technologies and renewable energy?

**William Gillett:** That is a different issue from the Concerto issue. The pushing forward comes partly at a public sector level, with Governments committing themselves to supporting schemes and to mobilising activity. The UK has recently moved forward substantially in the race, compared with a few years back. Germany is, as is immediately obvious, one of the leading countries. Members will have seen from my note that we are currently assessing the feedback on renewable electricity that has been received from various member states. Before the Bonn conference in the first week of June—sometime in May, hopefully—we hope to publish a communication giving a picture of how we now view the status of renewables in different member states.

**Christine May (Central Fife) (Lab):** Good afternoon. I had the pleasure of being briefed by DG energy and transport in Brussels some years ago. You have done a fair bit of work in Fife: on the coal gasification project at the Lurgi plant at Westfield and on clean-coal technology, under the Thermie project, at Longannet.

My two questions are not directly to do with electricity generation. The first is on biofuels. Some briefing papers that have been sent to us in the past week or so suggest that the UK is not being as proactive as it might be in encouraging or supporting the production of biofuels. I would like you to comment on that if you can.

Secondly, what discussions do you have with DG competition? It has emerged in the course of our inquiry that the UK regulator is suggesting that the best value for the consumer must be foremost. That usually means the cheapest option for the consumer. How does that square with the need to support emerging technologies, perhaps to a far greater extent than applies to some of the more mature sciences?

**William Gillett:** Thank you for those questions. I am not sure how I can comment constructively on the question on biofuels. It is a relatively new step, from the Brussels perspective, and there are two dimensions to it. One involves setting goals at 2 per cent and 5.75 per cent by 2010; the second involves the relaxation of the excise tax, which allows people to push the sector forward. There are important issues in different member states: whether, for example, a state is pushing biodiesel or bioalcohols, or whether its main focus will be on longer-term processes such as lignocellulose—which involves trying to extract the oils from wood.

As I understand it, the UK is signed up. The targets are there and they are the same in all member states. We do not have suggestions for setting different levels in different member states because, to all intents and purposes, the levels were more or less zero in all countries. There are clearly interests relating to business, job creation and agriculture, and those are different in different countries. The UK also has its own special conditions.

I can say confidently that we are working very closely with DG competition. People from different member states have regularly approached us, questioning whether a given support scheme is the right way to go and whether we should be allowing support to be made available for renewables. We intervene on a regular basis in that area. Part of our team is dedicated to working closely with DG competition so as to ensure that the interests of the renewable energy sector are fully understood by our colleagues in that directorate-general, who generally have a broader brief and might not be so familiar with the details of the renewables sector. We have a very close working relationship.

**Chris Ballance (South of Scotland) (Green):** Good afternoon. Page 3 of your submission mentions the directive on the energy performance of buildings. When will it come into force in Britain? What is it likely to mean for renewable energy and energy efficiency?

14:15

**William Gillett:** It will come into force in Britain at the same time as in the other member states, in the same schedule. I believe that the date is in 2006. I can check the details—I have the document with me—but, from memory, it will be in 2006.

We see the directive as an important component in the whole picture for the renewables sector because a different market sector sells technologies to individual householders and building owners. To make the market accelerate, we must address that sector differently from how

large, high-voltage electricity generators selling to independent power producers or generators is addressed.

We believe that the directive is important for smaller-scale technologies, such as biomass heating. There are wonderful examples in Austria of systems that one can more or less forget about, just as one forgets about a gas boiler. A hopper, from which there is automatic feeding, is filled with biomass pellets and, once every couple of months, someone has the small task of throwing away a small quantity of well-compacted ash. The technology is becoming much more the sort of technology that busy people can have in their households. I am convinced that the sector is an important market sector for Scotland. Biomass opportunities here are enormous. Such opportunities would be an important result of good implementation of the buildings directive.

In Scotland, solar water heating might seem a bit remote, but some of the early work back in the 1970s and 1980s that took forward that technology in the United Kingdom was done in Scotland. My hope is that solar heating—both passive and active—will also be stimulated through the directive.

Once a person has a certificate for a building, they will have evidence of the investment they have made in that building. It should be more attractive for people to invest in the energy dimension of their building because it will be a residual value when they come to pass it on. That is part of the motivation.

**Chris Ballance:** What does the directive entail? You are assuming a level of understanding that you possibly should not.

**William Gillett:** The directive has a number of dimensions, one of which is the certification of buildings. That dimension is the most important one from the point of view of the renewables sector. The directive has other dimensions, such as regular inspections of boilers, that are equally important from an energy efficiency point of view. Of course, if we are to achieve a given percentage of renewable energy penetration into our final energy consumption, it is as important to reduce the total consumption as to increase the absolute quantity of renewable energy. One can see that happening on both sides with buildings—that is, the use of renewables increasing and overall consumption reducing through better energy efficiency. With the building directive, one will be required to certify one's building according to a methodology that is, at the moment, at the discretion of each member state, but there is a regulatory committee in which member states are already talking to one other and there seems to be a great interest among specialists in the field in reaching a common understanding of the

methodology. I expect that to collapse into a rather common understanding and approach throughout Europe, but, currently, each member state can still interpret the technical annex of the method of certification in its own way.

**Chris Ballance:** So the directive is basically a requirement on member states to enable such certifications to take place.

**William Gillett:** Yes. As with all directives, the European Council—which is the coming together of member-state Governments—and Parliament set an agenda, framework and time schedule. It is then up to each member state to implement things and transpose them into national legislation.

**Chris Ballance:** So the certification is about the building's energy usage.

**William Gillett:** It relates to the energy performance of buildings. When one purchases a building, as well as knowing how many square metres it has and how good its kitchen is, one will also have an understanding of its energy performance.

**The Convener:** I would like to pick up on what you said about your relationship with DG competition. I too have come across biomass boilers—not in Austria, but in Argyll. One of the problems that manufacturers or installers bring to my attention is their inability to get local authorities—or the procurers—to specify that this type of technology is the one that should be installed in a public procurement project. Clearly, if boilers are to be installed in a swimming pool or school that is situated on the edge of a large forest, it makes absolute economic and environmental sense to use this kind of technology.

It seems that the requirement to advertise public procurement projects in the *Official Journal of the European Communities* at least can make people think that they cannot specify that there must be local input to the fuel for the central heating boiler, for example. Have you come across that problem? If so, are people worrying unnecessarily that they should not be putting that sort of restrictive clause into an invitation to tender?

**William Gillett:** To be honest, it is not a problem that I have come across. I am trying to grasp what lies behind the difficulty. My understanding is that there are questions about the standards and qualities of fuels. We are working with the European standards body to try to standardise biofuels so that there is a common understanding about what is being purchased. Is the problem being encountered in the procurement of the boilers?

**The Convener:** No, the problem particularly concerns large projects that have to go out to

tender. There seems to be an idea that the person who issues the tender is not allowed to specify that the heating source, for example, should be locally available. Often, the person who wins the contract goes out and buys the cheapest boiler they can find, which uses whatever fuel is most convenient to buy rather than the fuel that is most environmentally sensible.

**William Gillett:** I am embarrassed to say that the problem is not one that I have come across. We have a number of demonstration projects in which that type of activity is done. People learn from each other how to deal with issues such as the one you have raised.

One of the reasons for having demonstration projects and for having the intelligent energy programme is to provide concrete evidence of how to get around those problems and how to deal with them. I am happy to take the question back to the directorate-general and to see whether my colleagues who specialise in the field can come up with some further information. I am embarrassed to say that I cannot.

**The Convener:** Perhaps I should put the question more broadly. Is there a conflict in public procurement between getting the lowest-cost option and the most environmentally sensible option? Do you come across that problem?

**William Gillett:** In the discussions in which I am normally involved, the debate usually revolves around what is meant by the lowest-cost option. The question then is whether people are talking about additional external costs or lifecycle costs. In many cases—I cannot say that it is true in every case—experience suggests that if the full lifecycle costs of a renewable plan are taken into account, the renewable option will provide a lower cost solution than the more conventional option.

**The Convener:** Would you be happier if the competition regulations allowed that kind of approach?

**William Gillett:** I need to understand the subject a little more: I am not sure that I would be on very safe ground if I were to comment on the subject in detail.

**The Convener:** I am just trying to make the point that if the competition directorate-general has a set of rules that say that people have to go out to tender and that they have to take the cheapest option—which a lot of people would say is the one that has the lowest upfront price—that might go against what your directorate-general is trying to achieve.

**William Gillett:** Yes, but I ask the committee to understand that this is not an area in which I am a specialist. My understanding of the situation is that our environmental state-aid framework recognises

that it is appropriate for public support to be put into cleaner and more sustainable energy sources. In many cases, that is the justification for allowing funding from the public sector to be put into supporting the use of these cleaner energies. Overall, for the benefit of society—both locally and globally—it makes sense to do that.

In that context, generally speaking, our colleagues in DG competition are perfectly able to accept the solutions to support the use of renewables that member states come up with. If there is a particular issue on the public procurement of biomass boilers, I need to take that back and we need to explore it. If the movement in that sector of the market is blocked, a solution must be possible.

**Mike Watson (Glasgow Cathcart) (Lab):** I notice that the European Union action plan for renewable energy sources, which was published in 1997, has a target of doubling the contribution of renewable energy from 6 per cent to 12 per cent by 2010. What progress has been made towards that target, particularly by the existing member states? The United Kingdom target is 10 per cent by 2010. That will make a contribution to the EU target, but I wonder where other countries are at this stage.

**William Gillett:** Please bear with me if I return to what I said a few minutes ago. We are preparing a report to tell you the exact information that you ask for. I understand that it should be available in May, and it will tell us how we are doing along that road. My personal understanding is that some countries and some sectors are exceeding their targets, while other countries and sectors are certainly not doing so. For example, on the rate of growth in the wind energy sector, the white paper to which you refer sought 40GW by 2010, but our expectation is now twice that figure.

**Mike Watson:** I am interested in the UK figure. Is it part of the overall plan for some countries' targets to be less than 12 per cent? Before we move on to consider the new members, is it regarded as acceptable for some of the existing members to have targets of less than 12 per cent?

**William Gillett:** In the member states, there are different levels of resource and different starting points. In some member states the level is well in excess of 12 per cent, but others will never achieve that figure.

**Mike Watson:** Were those targets reached through negotiation and discussion in your directorate-general before the plan was put into place?

**William Gillett:** Absolutely. There was a long process with the European Council and a long discussion on the electricity directive, in which the most recent targets were put. Back in the 1990s,



before the white paper was produced, there was a series of discussions and analyses—in about 1993 or 1994—that led to those figures. The 12 per cent target in the white paper is an overall target; we are now considering the matter sector by sector. We have not yet tackled the heating and cooling sector, which is an important contributor. Other than the buildings directive that we referred to earlier, there is little to push that sector, and that gives us a considerable reason to start working hard. There is a lot of head scratching as we try to work out how to go forward to achieve the overall goals.

**Mike Watson:** The plan was drawn up in 1997, before it was known what the accession states would be. To what extent has that affected your targets? Is it correct to say that the accession states will aim for a figure below 12 per cent? Without necessarily specifying individual countries, what is the effect of those countries' contribution to the 12 per cent target?

**William Gillett:** On the electricity side, as part of the *acquis communautaire*, we negotiated with each of the 10 accession states a green electricity target that is comparable to the target for the EU 15. I can let you have that list of targets, which is in the treaty. The accession states will sign up to the biofuels targets, which are common to everybody. However, it is unclear how we will push forward the heating and cooling side—that is an important component in which the biomass sector plays a key role. That is the one sector that we are trying to work out how to push harder.

**Mike Watson:** Will the accession countries not affect the overall target?

**William Gillett:** I beg your pardon; they bring down the overall electricity contribution from 22 per cent to 21 per cent. It is not a dramatic change, but there is an acknowledged marginal decrease in the electricity contribution of the enlarged EU of 25 states compared with that of the present 15 member states: it comes down by roughly a percentage point.

14:30

**Brian Adam (Aberdeen North) (SNP):** I will return to the area that the convener was trying to explore with you. My concern is not so much about the procurement of boilers for biomass but about the local procurement of the biomass itself for consumption. Are there any competition rules that would prevent us from including in the specification a clause that the fuel had to be sourced locally?

**William Gillett:** I am embarrassed to say that I cannot answer that question. I cannot think of any immediate reason why it would not be possible to do that, but I would have to check. I am sorry that I

cannot give you a clear answer, but I simply do not know.

**The Convener:** In the "Future perspectives" section of your submission, you talk about the need for greater emphasis "on electricity grid issues". Do you mean grid issues within or between member states?

**William Gillett:** We are discussing the addition to the sixth framework programme and the revised opportunities of which Scotland will be able to take advantage. Later this week, we shall discuss two areas of concern with the member states committee—it is still at that level because we do not yet have the final revision of the sixth framework programme.

One of those areas of concern is what is called distributed generation. All over Europe, electricity is being fed into the network at the low-voltage and intermediate-voltage levels of distribution grids and connections to the higher-voltage transmission systems. That creates a lot of opportunity for small generators to connect into and sell electricity to the grid and therefore to use small-scale renewable sources, but it also creates a new series of issues for the network managers to address. We are moving more and more to intelligent network management systems to take into account that small, intermittent and often renewable generation. Although our colleagues in the research directorate-general have studied that development in the past three or four years with a longer-term vision, there is now a need to involve regulators and distribution companies throughout Europe and get them to work together on it to learn how we manage the networks more efficiently and effectively as the percentage of distributed generation from those sources increases.

The second area of concern relates more to what we call decentralised generation, which is new generators coming on line in places where they were not before. Of particular interest is the new large-scale, offshore wind energy generation in small geographical zones where climatic variations can be important—for example, an anticyclone in an area of the North sea can reduce the available offshore wind power substantially. We will work on decentralised generation together with our colleagues in the electricity team, with whom we will consider the high-voltage transmission issues more seriously and consider how we can offset with variations in supply the changes that occur in one geographical area of generation. Such changes are not normal, of course. Generally speaking, a power generator that works with conventional fuel can be run all the time except when it is shut down for maintenance or when it has a failure, but if we put large quantities of hydro or wind power into the network,

we must face the fact that climatic variations can influence a lot of generators all at the same time. To deal with that involves thinking and working at the level of the high-voltage transmission network and thinking of that in the context of the single electricity market. That is very new to our team and to me, and we are still feeling our way forward. However, it will become an increasingly important issue for the renewables sector as the years pass.

**The Convener:** You might say that it is too early to say, but is there general confidence that problems can be addressed? We took evidence from the grid operators in this country that a fairly substantial proportion of renewables would not be a problem that could not be coped with. Is that your general feeling?

**William Gillett:** Given the current level of understanding, I think that there is more research to be done. That is why we are feeding into the research programme. There are technical issues to be addressed and statistical variations throughout Europe. This should be addressed at a European as well as a national level because trading of renewable electricity is starting to happen across Europe and we are keen to encourage that.

There are issues that can be addressed by individual utilities in their own back yard and there are issues that would normally be brought to Brussels to be discussed and worked on collectively. This issue is emerging and it should be addressed at a European level because it could well be that there are ways in which we could work together to come up with a better solution than each country would if it tried to do it on its own.

**The Convener:** It seems that increasingly there is the potential for people to get their electricity from further away. It is not immediately clear how that fits into the way in which grids are currently set up; they are either national or sub-national, with agreements between member states about interconnectors. Does the Commission think that it has a role in that?

**William Gillett:** Absolutely. My colleagues in the electricity directorate are aware of those issues and have started discussions on that point. As a source of renewables, Scotland is one of Europe's jewels. You have a strong wind regime, hydro power, wave and ocean technologies and biomass, but you are not in the heart of the demand region. Europe has to address the question of the extent to which it makes sense to make it possible to use some of the resources that form part of Europe's assets but which are not all accessible today.

**The Convener:** The alternative might be to move the demand.

**William Gillett:** I hope that as you and your industries in Scotland begin to capitalise on the technologies, you will use some of your local energy to produce technologies that you can export to other parts of the world. That will benefit Scotland and Europe.

**The Convener:** I have one final point. I noticed an article in the papers at the weekend saying that Iceland sees a role for itself in selling electricity to the EU. Has the EU been approached about that?

**William Gillett:** We have a good relationship with Iceland, particularly in the geothermal energy sector, in which Iceland has unique resources.

There are two energy vectors. Today we transport a lot of our energy by electricity, but interest is emerging in hydrogen as an energy vector. Iceland is seriously considering trying to export its renewable energy resources in the form of geothermal energy through the vector of hydrogen. That has the potential to be an interesting way to build up an export market for Iceland's resource.

**Mr Jamie Stone (Caithness, Sutherland and Easter Ross) (LD):** Given what you have just said, do you have anything to say about structural funding? I realise that that might be slightly outside your remit. Obviously some consideration is being given to the remoter parts of Scotland and, in a way, to the son of objective 1. Do you have anything to say about objective 3?

**William Gillett:** What I can say is not very detailed. We have an on-going working relationship with the regional policy directorate-general. Of course, the responsibility lies with the regions to prioritise what they do in the context of cohesion and regional funding. We have a common understanding with DG regio that our colleagues should at least encourage the regions to take renewable energies and energy efficiency seriously when they determine their priorities. It is important that the sector receives regional support because it brings a number of potential benefits such as the reduction of the dependency on importing energy, which costs money. The sector also provides opportunities for job creation through manufacturing technologies and energy production. We have an on-going dialogue on that issue with DG regio. The understanding is that, depending on the region, renewables and energy efficiency should receive a reasonable level of funding in the regional funding package.

**Christine May:** The final reference on the last page of your submission is to the directive on cogeneration. I welcome your encouragement for the use of biomass energy. I am interested in the use of biomass in co-firing, particularly with coal. What are you doing to encourage development in clean-coal technology, notwithstanding the fact

that such power stations may well be phased out by 2016?

**William Gillett:** In the first call of the sixth framework programme, we prioritised demonstrations on co-firing with biomass, but we were a little disappointed by the response. We do not understand why that technology has not taken off to a greater extent. We are aware of projects at member-state level. Many people think that if we are to achieve our ambitious goals for the biomass sector, co-firing is an important technology because much of the existing infrastructure that is used to handle and transport fuels would need only modest modifications to handle biomass rather than the fuels for which it was originally designed.

We are more or less certain that we will leave that issue open for future calls with a view to promoting and encouraging further co-firing developments. At present, we do not envisage bringing conventional clean-coal or gas-fired demonstrations back into the sixth framework programme. The option remains open for the future, but it is most unlikely that we will include the option in the final two years of the sixth framework programme.

**Christine May:** I want to take you back to your earlier comments about the verification framework for biomass and guaranteeing the trail from forests to furnace. I understand that that has been a difficulty for the biomass sector, which might be why you received few applications.

**William Gillett:** We asked for projects in which the supply chain was an integral part, not just for technological combustion projects, which were something for the previous millennium. We need to take an integrated approach. I know that that is difficult, but encouraging signs have been emerging in local communities. Perhaps initiatives such as the Concerto programme might help. Rather than simply dealing with technologists, we should aim to involve the whole community in the process. In the promotion of Concerto, we have tried hard to involve community decision makers, including those in the agriculture sector, as well as technologists who are involved in combustion and electricity generation. The supply chain is critical to the biomass sector.

**The Convener:** As there are no further questions, I thank Mr Gillett for his evidence.

We now move on to the second panel under item 1. We have with us Lewis Macdonald MSP, who is the Deputy Minister for Enterprise and Lifelong Learning. I ask him to introduce his two officials, after which we will move straight to questions.

14:45

**The Deputy Minister for Enterprise and Lifelong Learning (Lewis Macdonald):** Certainly. Robin Naysmith is the head of the energy and telecommunications division and Neil Stewart also works on the energy team.

**The Convener:** Paragraph 5 of your submission states:

“There has been little interest shown so far in developing offshore wind energy”.

The truth is that little interest has been shown in developing anything renewable, other than onshore wind. A lot of us feel that having missed the bus to some extent on onshore wind—although I know that there have been some positive developments—we are in danger of missing it again on the other technologies. Are you conscious of that danger, and are you confident that we have got the mechanisms in place to ensure that that does not happen?

**Lewis Macdonald:** Nothing is higher up the agenda. I am glad that you started with that question, because you are right to highlight the importance of the issue for us, in terms of meeting our economic aspirations and in terms of the environmental impact that we wish to have. Nothing is more important than ensuring that we attract the new technologies and encourage their development.

Thus far two modes of renewable generation have featured strongly in Scotland. Hydroelectric has been with us for a long time, but it is worth pointing out that a number of new hydroelectric schemes were approved in the past year, and this morning I approved the addition of a further turbine at Fasnakyle station, which will add 7.5MW of capacity. So we are dealing not just with wind, but with hydro, which is the long-standing mode. Wind power is relatively new. Hydro accounts for around 2,000MW and wind accounts for around 200MW, but a lot of significant projects in those two areas have been approved in the past 18 months.

The reason why we are looking beyond 2010 and beyond what we are confident that we can achieve on the basis of existing technologies is that we recognise that if we are to achieve a further substantial increase in renewable generation, we need to attract the new technologies to be developed and put in place here.

The answer to your key question is that we are very much focused on these matters. The forum for renewable energy development in Scotland—FREDS—which we established in the autumn of last year has set up two sub-groups so far. The first sub-group that we established is on marine energy and is examining the new wave and tidal

technologies that have not yet come on stream commercially. The second group, which we set up at our second meeting, at the beginning of this year, will look into biomass. We are expecting a report on marine energy in May, and a report on biomass in September. Both those reports will form the basis of the strategic approach that we will take to maximising the potential of those renewables.

Although offshore wind has not yet reached a commercial point around most of Scotland, one consent is in place in the Solway firth for the Robin rigg wind farm. We are helping to fund a demonstrator project for what could be the first deepwater offshore wind farm, at the Beatrice oil platform in the Moray firth.

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

My question follows on quite neatly from the convener's first question, because I want to talk about planning consent, about which there is a large section in your submission. Do you acknowledge the concern that, because power companies are commercial organisations, they will clearly pursue the cheapest option in order to meet renewables targets? At the moment, the cheapest option is onshore wind. Without a robust planning framework in place, all the eggs will go into one basket. Companies will seek to meet their targets simply through onshore wind developments. As I am sure you are aware, dozens of planning applications are in the pipeline for onshore wind developments throughout the country.

Paragraph 38 of the Executive's submission says:

"We believe, however, that the current planning guidelines are sufficient at present and indeed provide robust guidance for developers and for local authorities."

However, you may be aware that a number of bodies have taken issue with that in written evidence to the committee. For example, Aberdeenshire Council has called for

"a more robust and clearly defined Planning Framework"

and the Scottish Society of Directors of Planning says:

"there is an urgent need for planning guidance to be updated."

Bodies such as RSPB, Friends of the Earth Scotland, Scottish Environment LINK and, of course, Scottish Natural Heritage—one of the Executive's own advisory bodies—say that there is a need for a national locational framework. Therefore I wonder how you can be quite so definite in defending the current planning regime. The weight of evidence is that people do not consider it satisfactory.

**Lewis Macdonald:** It is important to acknowledge what the planning regime is there for. One of the reasons why the success rate for renewable energy developments is twice as high in Scotland as it is south of the border is that our renewable energy planning guidelines and advice are up to date. The national planning policy guidelines were reviewed in 2000, as Sarah Boyack will know, and the planning advice notes were reviewed in 2002. Those reviews reflected two things: first, Government policy, which is that planning policy should enable and support renewable development; and secondly, the existing mix of technologies and the projects that are coming through. As a consequence, the level of approval for developments has been high. That has not been simply because planning policy points councils in the direction of supporting developments; it is also because councils can make rational and balanced judgments on the basis of up-to-date guidelines and advice that reflect the existing technological mix and the standard of development that power companies ought to be able to achieve. We are therefore content with the basic framework.

As with any planning policy—but especially in areas of technological change—we will of course keep a watching brief. However, I do not accept that the planning guidance is insufficiently robust. I understand the issues that surround locational guidelines, but the planning policy, as it stands, gives local authorities the option to develop a locational approach to renewable energy developments in their areas. They are free to do that. We have not heard any convincing argument for taking those locational judgments away from local authorities and vesting them in the Scottish Executive or at Scottish level. We believe that such judgments are appropriately made at local level. We encourage local authorities to consider for themselves what their best approach is.

Another point that has been made is that we should specify that area A should aspire to produce only amount X of renewable energy. We reject that. We are nowhere near the point at which we could usefully cap the amount of renewable energy produced in any particular area without running the risk of losing good developments in that area.

**Murdo Fraser:** The point that you made about local authority locational guidance is very important. In Perth and Kinross, which is part of the area that I represent, people who live between Dunkeld and Aberfeldy are facing three large-scale planning applications, and more are in the pipeline. There may be up to 100 wind turbines, 350ft high, in the immediate environment of those people, who live in an area where planning controls in every other respect are extremely strict, to the extent that people cannot even get

permission for dormer windows in their houses. Despite that, people may see large-scale industrial development in a rural area.

I wonder what you are saying to these people. Are you telling them, "Tough," and that they simply have to put up with the situation? As for local authority guidance, if, for example, Perth and Kinross Council comes up with a strategy for local guidance, will the Executive support it? If the council decides to refuse specific applications, will the Executive overturn them on appeal?

**Lewis Macdonald:** I believe that one or two councils have issued locational guidance to developers on where they might proceed with developments. Because the Executive has made provision for such an approach, we do not find it unacceptable in principle. However, any planning process in which local authorities make judgments on planning applications will obviously involve an appeal. Such an appeal would be judged like any other planning appeal on the basis of the strategic plan—the structure plan, if you like—for the area in question and the planning advice that the local authority has to hand.

That said, I do not want to prejudge any appeals that might arise from unsuccessful applications. Indeed, members would not expect me to do so. Councils understand the procedures for including locational directives in their strategic plans and know that they must judge each application impartially on that basis.

As for what I am saying to the public, I heard you use the phrase "industrial development". It is worth saying that public attitudes to wind farm development are not as uniformly hostile as they are sometimes represented. In fact, the evidence that we have received through independent polling strongly suggests that a large proportion of the population welcomes appropriate wind energy developments. Moreover, when people who live adjacent to existing wind farms were asked whether they would like to see their local facility expanded, a very significant proportion of them said yes.

I hope that part of my message to the people to whom you have referred is some reassurance that it would certainly be worth their while to talk to communities where wind energy facilities have been developed. They might find that those people are less concerned about such developments now than they were before the facilities were built. Although I acknowledge that the quantity of development applications can put pressure on local authority planners, we need applications to be submitted on that scale to allow the necessary amount of appropriate projects to be developed.

**Murdo Fraser:** I am grateful for your assurances. I think that attitudes on this issue

have a lot to do with the scale of developments. After all, many more developments have been proposed, some of which involve much larger turbines than have been installed previously.

I want to press you on the issue of local consultation. In the past few weeks, the Executive has turned down the proposed hydro scheme at Shildaig/Slattadale in Wester Ross, despite the fact that Highland Council said that it was happy for the development to go ahead. Does that contradict your opinion that local councils' views should be given some weight? Surely, to be consistent, you would have allowed that scheme to have progressed.

**Lewis Macdonald:** We operate under the existing legislative framework, under which—if I can put it simply—applications for electricity generation up to 50MW are determined by local authorities. However, applications for hydro and offshore installations that generate more than 1MW are determined by Scottish ministers.

In cases that are determined by the Scottish Executive, we give a consent under the Electricity Act 1989, which means that it is not governed by planning legislation. Essentially, we consult the local authority among others and any objection to the application by the local authority automatically triggers a local public inquiry into the matter. It is important to realise that Highland Council made no comment on the Shildaig application; it simply transmitted the information that it had gathered from its consultation without drawing its own conclusions. It was left for Scottish ministers to make that judgment. The judgment that we made on the basis of the likely environmental impact was that we should not permit the Shildaig proposal to proceed. Generally, we expect local authorities to deal with applications for which they are responsible. We also expect them to feed into consideration of applications for which we are responsible. If they choose not to make a recommendation either way, that is a matter for them.

15:00

**Brian Adam:** I return to the issue of local authorities' locational strategies. I accept the point that the minister makes, but those who take a different view have pointed out that often there are cross-boundary issues. In Moray, for example, a number of planning applications have been approved and others are outstanding. Very close by, in Aberdeenshire, the situation is the same and we may end up with a high concentration of wind farm developments. If local authorities determine the location of wind farms, a proper view will not be taken. A much wider view must be taken because of that concentration of wind farms across council boundaries.

**Lewis Macdonald:** The planning guidelines permit cumulative impact to be taken into account, which is important. In the situation that Brian Adam describes, neither council has chosen to indicate a locational preference, which is a matter for those councils to determine. However, the fact that a development happens to be on a council area boundary does not change the fundamental choice that local authorities have to make, or prevent local authority planners from taking cumulative impact into account even if that is spread across more than one council area.

**Richard Baker (North East Scotland) (Lab):** I was pleased to hear you talk about the forthcoming report on marine energy, because in this inquiry we have heard a great deal about its potential as a developing industry in which we can take a lead. Your submission notes:

"Scotland has the greatest marine energy potential in the UK."

The Executive is already investing significantly in research. Is that investment likely to continue or expand? Does the Executive have plans to go beyond investing in research and to intervene to help bring the designs that are being developed here closer to market?

**Lewis Macdonald:** Those are very good questions. As the member knows, we have already invested £2 million in the European Marine Energy Centre in Orkney. That is a significant investment. I do not want to prejudge the report that I am expecting from the marine energy group of FREDs at the next FREDs meeting in May, but I would not be at all surprised if it highlighted some areas in which additional investment would produce significant benefits.

Already there is a substantial stream of investment in renewable energy by the Department of Trade and Industry. We work very closely with the DTI, for a number of good reasons. Our targets are very compatible with those of the DTI and the DTI appreciates fully the importance of Scotland in meeting the wider United Kingdom targets. We hope that that co-operation will continue. The DTI has worked with us on a number of specific projects.

We are investing in and supporting the demonstrator project that I described on Beatrice, an oil platform that belongs to Talisman Energy and is nearing the end of its productive life. Scottish and Southern Energy is also involved in the project, along with Talisman.

Members will recall that a few weeks ago we approved a Sewel motion on the Energy Bill, which is not yet quite through Parliament but will, we hope, be passed shortly. The bill is important and includes provision for payment to Scottish ministers of a sum that may work out at something

in the order of £4 million or £5 million a year. The bill will specify that the money should be used for the promotion of renewable energy. Clearly, that promotion may take a number of different forms, but it is especially likely to be focused on those sectors of renewable energy where investment now can enable development in the future.

**Richard Baker:** I want to ask about jobs in offshore renewable energy. In your submission, when discussing how to bring marine energy closer to market with an eye to potential job creation, you say that

"between 17,000 and 35,000 jobs"

could be created by the renewable energy industry by 2020. There is wide variation between those two figures. I presume that we are hoping that some of those jobs will be created in the field of marine energy, to get closer to the 35,000 mark.

You mentioned the Beatrice platform project. Do you hope that more jobs could be created by companies capitalising on the existing infrastructure in the North sea for offshore wind, for example, and on the skills that already exist in the energy industry there?

**Lewis Macdonald:** Yes. Talisman Energy is investing in the project and is, in a sense, trailblazing because it is one of the companies that have made a living from North sea oil and gas. It recognises that the industry has another good 30 years of production, but that clearly some fields are reaching the end of their productive capacity. Therefore, making use of the infrastructure for a new form of energy production is clearly in the company's interests as well as in the interests of the Scottish economy. That is why we are keen to work with that company.

There is an enormous skills base in Aberdeen—which has been the centre of the oil and gas industry and has the potential to play a very strong role in the renewable energy industry—and in other parts of Scotland where there has been a manufacturing element, such as fabrication companies or engineering service companies. One or two companies that already operate in the North sea have moved substantially from an oil and gas service role to a renewable energy role—particularly offshore. Those trends are to be encouraged.

The study on the jobs potential is valuable. The study, which was commissioned jointly by us, the DTI and the enterprise networks, recognises that currently about a quarter of the renewable energy jobs in the UK are in Scotland. If the figure of 35,000 for the potential number of jobs in the UK is right, clearly we would want not only to maintain a quarter of those jobs, but to go beyond that.

I expect some crucial points to be reached over the next three, four or five years in the development of the technology and its commercialisation. In that context, it is important to mention the intermediary technology institutes, and in particular the energy ITI, which is based in Aberdeen and which will have the role of making the link between scientific university research and the commercial marketplace. Nowhere is such a link more important than in the new renewable technologies.

**Mr Stone:** I have two questions. I asked the previous witness, Mr William Gillett, about the grid and whether he would like to make any comments about structural funds—indeed, objective 3 funding—which may be available for parts of the Highlands. He said that there was some co-ordination in Europe on that issue. You talk about communities that welcome wind generation—you have heard me say before that there is a possibility that communities in north-west Sutherland would also welcome wind generation, but for the fact that there is no grid connection. My first question is whether you have any comments on that.

Secondly, I have questioned you about the development of the production of hydrogen. You have talked about the research work and I guess that you are referring to research in that area, among others. Notwithstanding the good efforts that are being made, do you think that the level of research at the cutting edge is as directed and as strong as it should be? Should we be trying to rope in other academic institutions to beef up the research still further? It seems to some of us, particularly after what we heard in Kintyre, that hydrogen could almost be the holy grail in getting round problems such as intermittency in wind power.

**Lewis Macdonald:** The hydrogen option is a little bit further down the track, as I think you imply. We will examine that area in the context of FREDS in the near future. I have described the two areas that we are examining at this point in time, but we are clear that hydrogen is one of the areas that we will want to address towards the end of this year and the beginning of next as the FREDS work goes forward. We recognise that hydrogen has potential.

It is worth saying that the energy ITI's job is not only to capture the commercial and economic benefits of good research in Scottish universities; it will look nationwide, UK-wide and worldwide for the best expertise and the best research ideas, and will consider how those can be turned into commercial potential in Scotland.

A twin-track approach applies to hydrogen as well as to the other technologies that we have discussed. We want jobs to emerge at the other

end. Some of the 1,800 to 2,000 jobs that we have created in Scotland in renewables involve manufacturing for a company that is owned elsewhere—that happens at Vestas-Celtic Wind Technology Ltd in Campbeltown, for example, which the committee has visited. We would like to have such jobs not only in the new technologies, but in design, at the high-value end.

The twin-track approach encourages academic research and its translation into jobs at every level in the economy. Achieving that is not necessarily a matter of central Government directing where universities should operate, but we are sending clear signals to all our partners that the new technologies are of great interest to us, that they have great economic potential and that we would like such science to be applied.

I ask Robin Naysmith to answer your first question, which had a European aspect.

**Robin Naysmith (Scottish Executive Enterprise, Transport and Lifelong Learning Department):** Was that the question about grid issues?

**Mr Stone:** Yes.

**Robin Naysmith:** Investment in the grid is a matter for the asset owners, which in Scotland are Scottish Power and Scottish and Southern Energy. They principally decide where and how the grid is upgraded and those decisions are based largely on where existing infrastructure is and on the return that those companies can obtain on their investment. That is regulated by the regulator, which is the Office of Gas and Electricity Markets. Ofgem is in touch with regulatory authorities throughout Europe and I have no doubt that good practice can be learned from that.

I am not aware that Scottish Power or Scottish and Southern Energy has explored the funding route that Mr Stone suggested, but it might have potential.

**Mr Stone:** As you said, decisions are based on existing infrastructure, so a new line would be laid roughly along the track of an existing line. An attraction of European Community structural funding is that it would allow the leap of imagination required for the construction of a brand new line into north-west Sutherland. I know that Alasdair Morrison is interested in what can be accessed in the outer Hebrides, and crofters have told me that such a line would be fantastic and would be one way to stop the decline in places such as Lochinver and Kinlochbervie, which take fish landings.

**Lewis Macdonald:** Are you asking about supplying power to those areas rather than receiving power from them?

**Mr Stone:** I am asking about receiving power from those areas. If the matter is left to the companies, which choose to run along existing lines, the temptation would be to create a pattern that is broadly similar to the one that exists today. No matter how well upgraded such a line might be, we might miss an opportunity in some remote and windy areas.

**Lewis Macdonald:** That option is interesting. In our FREDs discussions with the companies, we could gauge their view on that. They have not brought that issue to us.

**The Convener:** I welcome to the committee the Environment and Rural Development Committee's convener, Sarah Boyack.

**Sarah Boyack (Edinburgh Central) (Lab):** Thank you, convener. I am glad to ask a question at your committee.

Paragraph 9 of the Executive's submission is about photovoltaics and says that that technology is not generally cost effective. The Environment and Rural Development Committee is keen for the environmental benefits of new technology to be developed. That opportunity is presented not only by photovoltaics, but by solar heating technology, which is powerful and is also good for energy efficiency if it is built into new developments. What is the Executive doing to develop that raft of technology? That includes small-scale wind power, which is developing rapidly.

Countries such as Germany, the Netherlands and Japan have set targets that lower costs and gear up manufacturers for delivery. London is now setting targets. To what extent is the Executive thinking about how we move that sector forward, particularly in the areas of commercial and domestic new build? Some good projects are being funded by the small-scale renewable community initiative and money is coming from the UK Government on the energy side. There are now a lot of pilot projects that are doing really well. At what point do you see those technologies being taken up as general technologies that will be applied across Scotland? Such technologies have the specific benefit of not necessarily being at the outer stretches of the grid, but in the main parts, where the grid is particularly strong and can cope with such developments.

15:15

**Lewis Macdonald:** Such developments are taking place. Around Christmas time, I opened a new development in Arbroath, where solar panels have been built into council homes. That was an interesting new development and there are a number of such developments under the Scottish community and householder renewables initiative, which seeks to encourage those technologies. We

are keen to promote solar technology because there is a bit of a market failure in Scotland, which is not the case in the London area. A network of installers with the necessary expertise and understanding of the technology is simply not widely available across Scotland. We are keen to use the money that we are putting into community and household renewables to stimulate some growth in the installer network and in the level of technical expertise, which is important in order to make the technology an attractive proposition for householders and community organisations.

On UK energy funding, a number of Scottish projects, including a community centre in Lewis, a school in Harris, the fish market in Wick—I am sorry that Jamie Stone has left us and so is not here to acknowledge the importance of the fish market in Wick—and a housing association development in Glasgow, have already benefited from the major photovoltaics demonstration programme. A range of schemes have benefited from that UK investment, and we recognise that contributions can be made, both by the Scottish Executive and by the UK Government, in providing funding, stimulating the market and addressing some of the market failures that exist.

Contrary to some preconceptions, solar energy can be effective in Scotland, because we have a lot of daylight hours, at least at certain times of the year. It is an area that has potential and we recognise that that potential has not yet been tapped. We hope that, through the community initiative in the first instance and through DTI support, the use of that technology will grow over the coming period.

**Sarah Boyack:** That is a positive response with regard to the work that is already going on. What I am trying to tease out is the long-term environmental benefit that we can gain. Other members of the committee will talk about job opportunities, but it has been suggested that lack of access to the grid and the bureaucracy of trying to link in—whether for photovoltaics or small-scale wind technology—make it difficult to capture the full economic benefits for the people who install such technology. To bring down costs, perhaps we should look at building standards, particularly as that is something that we can do on our own in Scotland, and at public procurement. We now have some champions in the public sector, whether in schools or in housing associations, who know that they can make the technology work, but we are not quite there.

To what extent can the Executive help people to get over some of the current challenges? We know that the technology works, but we must get into a position in which people can make such technology the natural choice for new buildings.



**Lewis Macdonald:** I take that point. We recently made adjustments to the renewable obligation certificates, to make it more economic to connect small quantities of renewable energy to the grid. In a couple of years' time, when we engage, along with our colleagues in the DTI, in a full-scale review of the renewable obligation certificates, I suspect that we shall consider how best they can be applied in the context of the different technologies that exist, so as to stimulate the market.

Neil Stewart and Robin Naysmith may want to comment.

**Neil Stewart (Scottish Executive Enterprise, Transport and Lifelong Learning Department):** We are gathering a lot of advice through the community and household renewables scheme, which is not just a grants scheme but an advisory service, with 11 advisers across Scotland. We intend to produce details of case studies of all the technologies and of all the projects that are going ahead. We are just starting work on that now. All those details will be published, and the advisers will take the results of the case studies out into communities and spread the word. We hope that the good practice of the initial schemes will be followed up and that there will be many more of them throughout Scotland.

**Lewis Macdonald:** It is worth putting on record the general point that our aspirations are environmental as well as economic. We recognise the significant potential for carbon savings through promoting all the technologies over the relevant period and hitting the targets that we have set.

**The Convener:** Susan Deacon wants to ask a question. Is it a supplementary question, Susan?

**Susan Deacon (Edinburgh East and Musselburgh) (Lab):** It could be.

**The Convener:** We will stick with the current line of questioning for the moment.

**Christine May:** Good afternoon, minister. I will make three interrelated points, and I would like to ask you to say, in respect of each, what you are doing to deal with the issues concerned. It is remarkable how far we have come, even since we started the inquiry, in considering not just wind energy but the potential of, and what is being done for, other forms of renewable energy.

First, I note that the second FREDs report will be on biomass. If you heard my question to Mr Gillett, the representative of DG energy and transport, you will know that I asked about the issue of supply chain guarantees, which is exercising some minds in the biomass industry. Mr Gillett said that the DG energy and transport was disappointed in how few applications it had received for biomass pilots from the UK. Could

you comment on what you are doing—other than what is in your report—to encourage people in that regard?

Secondly, FREDs has no power to study how any of the pilots perform in market conditions. My question on the matter to Mr Gillett was about the tension between Ofgem's priority of securing the least cost for the consumer and the need to support the various emerging technologies with considerably more funding than is allocated to existing ones, so as to make them market affordable.

Finally, could you tell us a bit about the liaison that you have not just with other departments and ministers in Scotland but—this is equally important—with ministers and departments at Westminster and in Europe, to ensure that there are no fiscal or legislative barriers to our developing what are very important industries for Scotland?

**Lewis Macdonald:** We recognise the potential for biomass. A few moments ago, I spoke about the Scottish community and householder renewables initiative in the context of solar power. A number of the projects that have been developed under that initiative are to do with biomass, in which we are seeking to stimulate some interest. Scottish agriculture and forestry account for significant parts of our landmass, and if we can find ways to move some of their production in the direction of energy industries, that would be helpful.

As I think Christine May implied, there are currently some market difficulties. Our main mechanism for addressing market issues around renewables is the renewables obligation (Scotland). We have recently adjusted that a little bit in order to extend the period of co-firing. That, I think, is the way forward—at least in part—for biomass. We should recognise the existence of fossil fuel power stations that have a limited lifespan ahead of them, and we should encourage, or create the possibility for, fossil fuel burners to co-fire with biomass. That assists them to meet their obligations and to maximise the use of the assets that they already have. It also provides a platform from which we believe the biomass industry can grow.

I am looking forward to hearing about the strategic thinking and conclusions that will come out of the FREDs biomass group. We have sought to draw not only on the people who sit at the FREDs table, but on other people with an interest and understanding of particular sectors, on which sub-groups are working. We hope that that will address both the market-related issues that Christine May raised and the potential for promoting diversification at the production end as well as at the point of energy generation.

We have close liaison with the DTI and with Renewables UK, the agency for the renewables sector, which is based in Aberdeen. It takes part in FREDS—the head of Renewables UK is an observer at FREDS. Similarly, we have representation at official level at the Renewables Advisory Board, which advises the UK Government. We also have a good bilateral connection with the DTI. Those are the chief mechanisms through which we address the issues together.

Thus far, there has not been the same level of bilateral contact, certainly at ministerial level, with the European Commission. Of course, we expect the DTI to conduct quite a lot of the discussion and to take Scottish interests into account in doing so.

**Christine May:** Has there been any European Commission input into FREDS?

**Lewis Macdonald:** No, not directly. I will ask Robin Naysmith to come in on that point.

**Robin Naysmith:** As the minister said, there is no direct input from the Commission. I have a couple of examples of bilateral initiatives across Europe that have the potential to yield some useful collaborations, which I did not get a chance to mention earlier in response to Mr Stone's question about hydrogen.

I was in Germany in January because of the bilateral collaboration agreement that we have with the North Rhine-Westphalia Land, which is significantly ahead in a number of renewable technologies. Our colleagues there saw the potential for us to do some joint work on hydrogen, because that could build on our academic capacity in the field.

The other potential collaboration that we are mindful of at the moment, particularly in relation to the issues that Mr Baker raised, is with Portugal, on the subject of marine energy. Last month—I think—a delegation from Portugal visited Scotland. We held interesting discussions about where Portugal and Scotland are in relation to the development of marine industry and the potential for us to do some collaborative work.

**Mike Watson:** I want to ask about the proportions of the different types of available renewable sources that will allow us to meet the target of 18 per cent by 2010. It seems that the overwhelming proportion is to be met by wind power. We have heard in evidence about its variability and that a significant amount of back-up energy has to be kept—I think the figure is about 20 per cent—in case the power generated by wind is not sufficient.

In your submission, you highlighted the variable nature of hydro production, which I had not heard about before in the inquiry. You said that hydro

production was dependant on the weather in any particular year. Are you happy that the percentage spread is so much in favour of wind power?

**Lewis Macdonald:** There is an argument that we will become a more renewable country if our weather gets more windy and wet, but I do not want to go down that road.

**The Convener:** That argument is not an election winner, minister.

**Lewis Macdonald:** Indeed. Mike Watson rightly highlights the importance of wind and hydro over the coming period. We agree with and accept the point that the renewables that come on stream in the course of this decade are likely to come overwhelmingly from those two technologies. That is in itself not a problem. It is partly a matter of critical mass. If we reach or surpass our 18 per cent target by the end of the decade, we will have done so in the context of a very broad mix of energy sources that will include nuclear, fossil, existing hydro plus new wind and hydro. Although there are intermittency issues around wind power in particular, those issues should not in themselves create any real difficulty, given that 80 per cent of energy comes from other sources.

Clearly, as we move through the next decade, it will be absolutely critical for us to address those issues and for us not to not rely, in meeting our 40 per cent target, on wind and hydro alone. That is why we are keen to stimulate the other technologies that are coming forward.

We should not overstate the intermittency issues around wind and hydro power. In the past two or three years, hydro has contributed around 10 or 11 per cent to our overall supply—there is not a huge range as a result of intermittency. I suspect that wind power will not have much more of a range as a result of intermittency, but I recognise the need not to rely on those sources alone in the next decade.

15:30

**Mike Watson:** You distinguish between the 2010 and 2020 targets. Your submission states that we need considerable additional generation capacity—I think that the figure is 1,000MW—to meet the 2010 target, which obviously means that many planning consents will be required. Last week, the Ministry of Defence stated that it is in the process of agreeing a concordat with the Executive on the issue. Interestingly, the witnesses stated that one of the main reasons for doing so is to safeguard the interests of the MOD. Where does that concordat stand at present? What issues are being discussed and what barriers, if any, do the MOD's policies present to the Executive in achieving its aims?

**Lewis Macdonald:** I am happy to answer that question, but I will first reply to your opening comment. Although 1,000MW is significant additional capacity, on Scottish Executive consents alone—which are for large and hydro schemes—450MW was consented last year and about 140MW has been consented this year. The target is high, but we are well on course to achieving it. The one major wind project that has received consent this year is relevant to your main question because it is at Black Law on the boundary between South Lanarkshire and West Lothian.

**Mike Watson:** I should have pointed out that the MOD said that it objects to about one third of all applications, which is a pretty high percentage. That does not change the question, but I meant to make that point.

**Lewis Macdonald:** That percentage is high and it is potentially significant. The significance of the Black Law application is that I was able to give it consent because of the work that my officials did with the MOD and other interested parties to mitigate their concerns. The consenting of the Black Law proposal marks a significant step forward in our relationship with the MOD. We are working with the MOD to address its concerns and to win its support for our energy policy. I am pleased to say that because, in some cases, protracted discussions have been required to reach a resolution. The Black Law proposal takes us a significant step forward. We are also working with the relevant parties in civil aviation to deal with their issues.

**Mike Watson:** The Black Law example is interesting. Your submission states that you must “have regard” to issues that the MOD raises. To interpret what you said, am I right that the MOD was initially opposed to the Black Law proposal, but that, after discussions, agreement was reached and the proposal will go ahead? Do you feel that you have the power, through negotiation, to allay MOD fears and allow applications that it initially blocks to go ahead?

**Lewis Macdonald:** There is a combination of factors. One is a general concern from the MOD and civil aviation parties that wind turbines may interfere or cause difficulties in areas in which aircraft fly regularly. The other is a specific concern about interference with radar at airports. On the former issue, we seek to develop our relationships so that we—and the developers—understand the concerns and take them into account. The Executive has a useful role in working with developers and the MOD on that issue. The second factor is an important technical matter, but with our encouragement, progress has been made in one or two cases in devising technical solutions to the problem of radar not

being able to tell the difference between wind turbines and incoming aircraft.

We are working on a number of different aspects. Robin Naysmith may want to add something because he has been involved in the day-to-day work.

**Robin Naysmith:** I will add two or three points. The first point is in response to your question about whether we feel that we have the powers. One of the most significant changes of attitude that we have seen from the MOD of late is an acknowledgment that the UK energy white paper is a UK Government document and that the MOD is a UK Government department and it must accept UK Government policy. You mentioned that the MOD says that it objects to a third of the developments; when we started these conversations it objected to them all, so that is a measure of progress.

My last point is in relation to another development, which the minister approved towards the end of last year, at Hagshaw hill. It was a very large—or potentially very large—development, of about 130MW, to which the MOD initially objected. The MOD objected to the development vociferously and Scottish and Southern Energy—the developers—worked diligently with it to try to overcome its concerns. As a result of that, the minister was able to give consent to what, as of December last year, is potentially the biggest wind farm in Scotland. In response to the point that Mr Fraser made earlier about location guidance, had we taken the view that there was no point in seeking to build wind farms in MOD areas in Scotland that wind farm would not have been given consent.

**Lewis Macdonald:** That is an important point. A lot of progress has been made in the past 12 months.

**Mike Watson:** That is good to hear.

My second and third points on planning are of a more general nature. Earlier in the inquiry we heard evidence from the Convention of Scottish Local Authorities and also from Argyll and Bute Council. They said that there is a bit of resentment on the part of local authorities in relation to the fact that when section 36 consents are required to be granted that becomes the responsibility of the Executive. The matter is taken out of the hands of local authorities, yet local authorities have to bear the costs of the hearings if there is a public local inquiry and they do not get the costs refunded to them. In general terms, are there any plans to alter that situation?

My third point relates to another issue raised by local authorities. It is about the national location strategies, which your submission states that you are not minded to agree to. It seems to me that

some of the MOD issues could perhaps be dealt with through such a strategy. You seem to say that local planning guidelines are sufficient to deal with the sort of issues that local authorities have in mind when they advocate such a strategy, yet your submission also states that section 36 consents

“are not part of the local planning process”.

I am not sure how those statements sit together and I am not clear—perhaps you can explain—why you are opposed to what seems to me to be a good location strategy for planning the development of wind farms in the period up to 2010 and perhaps even beyond that.

**Lewis Macdonald:** Your first point is very important and has been raised with us. The relationship between local authorities and the Executive on section 36 is that the Executive is the determining authority. Therefore, the planning fee comes to the consolidated fund. Councils have a point when they express concern about the costs that they incur because they are statutory consultees. Even if there is no local public inquiry they will incur costs because they will want to consult their communities and so on about the big applications that come direct to us. We are happy to consider that point and whether there is a way in which we can satisfactorily address that concern.

On the second point, about location guidance, your previous question exemplifies why we would resist taking such an approach. Had we sat down two years ago and said, “Let us work out a geographical strategy for where we should permit wind energy development”, we would have excluded most of Dumfries and Galloway, South Ayrshire, South Lanarkshire and large chunks of the Highlands and Islands because those would all have been areas where we could have guaranteed that the MOD would have concerns. However, that is no longer the blanket case that it was a couple of years ago. It may well be, for example, that technological developments may allow the widespread concerns that have been raised on other grounds, such as natural heritage, to be reduced or mitigated in many cases. We would not want to draw a map of Scotland that excluded large areas because of aviation interests, natural heritage interests or other, if you like, artificially imposed or self-imposed constraints.

There are some constraints already. Jamie Stone rightly raised the question of the grid, and there are geographical grid constraints that limit some of the potential development. We think that, rather than put constraints on development, we should seek to liberate other areas to take part and contribute to the overall energy mix.

**Mike Watson:** I accept that. As an aside, however, some local authorities have their own location plans. Does that not sit at odds with what you have just said? Those plans would not cover the whole of Scotland, but if most of the local authorities in the areas where wind farms are likely to be sited were to develop such plans, there would in effect be a plan, even though it would not be joined up.

**Lewis Macdonald:** A local authority will address issues that are particular to its area, which seems a perfectly reasonable position for the applications for which local authorities are responsible. I understand the point that you make and the potential for paradox. Although the power to restructure plans exists, there is no great indication that local authorities are rushing to make use of it, and it has therefore not imposed significant constraints on development, so we have not had any difficulty with that. Our general approach is to encourage development, and if local authorities seek to promote a geographical approach, they will do that in the context of national planning policy, which directs them to support and facilitate the development of renewable energy.

**Brian Adam:** I refer you to paragraph 17 of the Executive submission, which talks about job opportunities in the renewable energy sector. There are obviously high hopes that the sector will provide new industries that will employ significant numbers of people and provide high-quality jobs. My understanding is that Scottish engineering firms have traditionally done a lot of work in electricity generation, so what impact is the move away from the non-renewable energy sector to the renewable energy sector likely to have nationally and internationally on Scottish engineering jobs?

**Lewis Macdonald:** Is it your concern that the growth of the renewable energy sector will have a negative impact on those jobs?

**Brian Adam:** Yes, indeed; the impact could be negative if we are not careful how we manage the change and ensure that there are real opportunities for Scottish engineering. We currently produce lots of turbines, for example.

**Lewis Macdonald:** Indeed. Babcock and other firms are involved in the electricity generating business and operate on an international scale, which involves a good deal of export, as well as producing for the home market. It is interesting, and is an encouraging by-product of our support for renewables, that many of the traditional heavy engineering firms are investigating and investing in options through which their technologies can become less carbon productive, less environmentally damaging and adjust to the changing needs of the marketplace. Those are, as you say, successful Scottish enterprises that have

operated well in national and global markets over the years and will continue to want to stay ahead of the game. We have already touched on the offshore production and support industries, but it is also worth remembering, as you are aware, that engineering jobs throughout Scotland service the oil and gas industry and that many of those engineering firms will follow some of those that are more directly involved in oil and gas in exploring the renewable energy and marine energy options.

I acknowledge your point. We need to keep an eye on the engineering sector, but in the long run and on balance, stimulating a new set of energy industries with a long-term future will not detract from the strengths that we already have in existing energy industries.

**Brian Adam:** I hope that the Executive will make a specific commitment to monitor trends in engineering employment to ensure that we do not lose out, because it is a major international business and there will be changes.

Let us move on to another matter. In paragraph 40 of the Executive submission, you mention being

“supportive of a proposal by Highlands and Islands Enterprise to develop a community equity scheme”.

Some interesting suggestions along those lines have been made to us by various witnesses. Can you give us some idea of the progress that has been made on that? What steps is the Executive going to take to encourage community enterprise in the development of renewable energies?

15:45

**Lewis Macdonald:** The convention of the Highlands and Islands met on the Isle of Arran yesterday. Jim Hunter, the chairman of HIE, gave a brief report on developments in renewables, including a report that progress is being made on the community equity proposals. Broadly, HIE's energy team is looking at the possibility of setting up a fund that would allow communities to borrow money to invest, after which they would repay a share of the profits to the fund in order that other communities could get the same benefits. It has not yet come to us as a formal proposal but, clearly, a good deal of work has gone into it over recent months.

Of course, that work in the Highlands and Islands has stimulated interest in other parts of Scotland. For example, Sylvia Jackson has invited me to visit a community in Stirlingshire that is keen to find a way of promoting a community share in a renewable energy project. I am happy to do that because that is the right way forward. You have probably had a number of discussions and taken evidence from many sources about how best to get community benefits built into community

development. We are keen to see that, but we want it to be done in a way that brings the interests of the community and the developer together, rather than setting them at odds across a negotiating table. Community equity proposals have the potential to do that.

We will follow closely the development of the proposals in the Highlands and Islands and then consider how we can assist their implementation throughout the rest of Scotland.

**Chris Ballance:** I have two lines of questioning. I would like to ask about marine technology, but first I would like to follow up the interesting line of questioning that we heard from Sarah Boyack.

We have been talking about the SCHRI. What is likely to happen to that at the end of the coming year? It has been put to us that that excellent project is taking three years to establish itself and does not know what is going to happen to it at the end of 2005.

**Lewis Macdonald:** I am sure that Chris Ballance would not expect me to prejudge the spending review process that will take place this year. However, I assure him that the SCHRI is, if anything, in danger of being over-subscribed. It has attracted a good deal of positive interest from around Scotland, and we expect to build on that interest. We also think that it has worked in the means of delivery. We use the energy team of HIE in the Highlands and Islands and the Energy Saving Trust as our agent in the lowlands. That has worked well. It has also addressed the issue of stimulating public support for the principle of renewable energy as well as putting projects in place. I agree that it is a successful initiative, and it is one on which I want to build in the future.

**Chris Ballance:** That is good news, as the SCHRI is successful and an excellent initiative.

It has also been suggested to us that there is a great deal of benefit in looking at the possibility of extending the ROC system to heating, so that we diversify away from electricity and encourage other methods, such as solar heating and biomass, for direct water and space heating. I wonder whether you can comment on that. That would be a way of reducing electricity demand and reaching the renewables targets more easily.

**Lewis Macdonald:** Yes. We are considering combined heat and power and how that is handled within the renewables obligation. That will be one of the questions that we ask about the renewables obligation when we come to our full review in 2005-06. We will ask whether it needs to address particular technologies in a particular way and whether there is a way of addressing the combined heat and power issue.

I do not want to imply that we have already reached a view on that. We do not know what our view will be, because it is clear that there are some difficult issues around heating, as distinct from electricity generation. I guess that making a change would have implications, but we will examine the matter closely. We are conscious that we are seeking not simply to increase the proportion of electricity that comes from renewable sources but to reduce the proportion that comes from carbon-producing sources. We must bear it in mind that, if there are other ways of doing that, we should address them. The renewables obligation might offer a mechanism for doing that, but we must be clear about what impact the changes could have on the marketplace and ensure that we do not devalue any of the things that renewables obligation certificates are supporting at the moment.

**Neil Stewart:** Can I add to that?

**Lewis Macdonald:** Please do.

**Neil Stewart:** The minister explained the position on combined heat and power, but I think that Mr Ballance also asked about heat. At present, there is no legislation that would allow us to provide ROCs for heat. That would require an amendment to the primary legislation at Westminster. Therefore, along with our colleagues in the DTI, we are considering measures other than the ROC system that will support the more efficient production and use of heat. Such methods include capital grants. As there are no powers to enable heat generation to qualify for ROCs at the moment, primary legislation at Westminster would be necessary to allow us to take such powers.

**Chris Ballance:** On our trip to Denmark we heard that whereas we extract between 25 and 30 per cent of the efficiency of a lump of coal in the process from power station to electricity to room heating, the Danes' use of CHP increases that to 80 per cent. A system whereby no one loses represents a clear gain.

In general, the potential exists for energy efficiency from more efficient devices and for energy conservation from an increased use of conservation measures, better building standards—as Sarah Boyack mentioned—and the more efficient use of electricity, which I have just discussed. Bearing all that potential in mind, when you set the aspirational target of 40 per cent of generation from renewables, what total level of electricity use were you assuming? Were you assuming that there was enough potential for efficiency savings for demand to stay constant or go down or were you assuming that there would be a constant increase in demand?

**Lewis Macdonald:** The answer is simply that we did not make any assumptions because, as you said, the target is aspirational. Mike Watson mentioned 1,000MW as the necessary target—

**Chris Ballance:** You mentioned it in your submission.

**Lewis Macdonald:** Indeed. A figure of 1,000MW is right for 2010 because we can estimate with a fair degree of confidence what demand will be by then. We cannot estimate with absolute confidence what it will be by 2020, but we can say that, in the interim period, we will be pursuing policies of increased production from renewables and of greater energy efficiency.

If the figure of a further 1,000MW of renewables generation that we aspire to by the end of this decade is added to the 2,200MW or 2,300MW of generation that we already have from the different forms of renewable energy, it is apparent that, in order to reach our 2010 targets, we are talking about a total of more than 3,000MW. If we were to use the same overall figure, we would be talking about adding another 3,000MW to double the proportion of production from renewables to 40 per cent. We are saying that, regardless of how much electricity demand increases or flattens out in that decade, we want to ensure that renewables are supplying at least 40 per cent of generation by the end of that decade. Although that is a ballpark figure, it still represents a specific aspiration, which is there to indicate the direction in which we want to go. We cannot count the megawatts now, but we aspire to making significant energy efficiency gains over that period.

**Chris Ballance:** I will move on to marine technology. When we visited the Vestas factory, we were told that only about 50 per cent of our spend on any wind development stays in Scotland and that 50 per cent goes to Denmark, mainly. It is clear that few prizes are awarded for being second in a developing technology.

Last week, the Scottish Energy Environment Foundation told us that, at present, Scotland has no hope of becoming the world leader in marine technologies that we aspire to be, and that that title sits with Portugal. Last week, we were told:

“To put it simply, Portugal has put in place a feed-in tariff for the first 20MW of wave or other marine energy. That tariff is set at €225 per MWh, compared to the £60 per MWh that we get from the ROC market at the moment.”—[*Official Report, Enterprise and Culture Committee*, 23 March 2004; c 798.]

The foundation suggested that neither FREDs nor Renewables UK can study how technologies compete in a market environment.

To give you more problems, we have heard that the MOD plans to object to any marine development in any coastal area that it has used,

may use or does use for military exercises. Given those problems, how confident are you that Scotland can become a world leader? When the Portuguese come here for discussions, how much do you steal their ideas and ensure that we take the lead?

**Lewis Macdonald:** I do not know what the marine equivalent of groundhog day is, but on marine energy as on wind energy, we will engage with the Ministry of Defence and seek to address its concerns early. We are not yet at the stage at which those are substantive issues, but we are working towards that. We seek to raise awareness that marine energy, like any other form of energy, has costs as well as benefits. Beginning that debate early would be helpful and significant.

I am surprised that the committee received evidence that Portugal is ahead of the game on marine energy. Portugal is keen to be in the game and is working hard at it. The country has a good natural resource, but it is nothing like as good as ours. One university there has an active interest in marine energy, but we have four universities with an active interest. Scotland has some of the leading individuals in device design and development at the Robert Gordon University and other universities and at companies that are taking the lead, such as Wavegen Projects and Ocean Power Delivery.

I am not aware that Portugal has test facilities that would compete with ours. It should be borne in mind that the European Marine Energy Centre in Orkney leads not just Britain, but Europe. I do not accept that Portugal is ahead of us, but I accept that Portugal is keen to be there and that it is providing financial incentives, which are also stimulating Scottish companies to be more productive and to press ahead with technological developments.

I am not unduly concerned about that competition, but neither am I complacent about it. If we are to get ahead and stay ahead, the industry needs to develop here quickly. We will examine appropriate mechanisms to stimulate that development. It is true that Portugal has put in place a feed-in tariff for marine energy that is attractive to companies, but it does not have the renewables obligation certificate system that we have, which is stimulating renewables development across the board. We are not coming from behind; we are ahead and want to stay ahead. We want to turn that position into commercial opportunities as quickly as possible.

**Chris Ballance:** Are your officials in regular contact with the Scottish Energy Environment Foundation? It gave us clear evidence last week along the lines that I described.

**Robin Naysmith:** I chair the advisory board to the Scottish Energy Environment Foundation and I am astounded by the opinion that the committee was given.

**Lewis Macdonald:** The discussion of that will be interesting.

**Chris Ballance:** The next board meeting will be interesting.

16:00

**Susan Deacon:** I should perhaps have an incisive follow-up question to that, but I do not.

I will attempt to draw together some observations from what you have said today and from the other evidence that we have heard. Renewable energy is an ever-evolving area, but it is clear that a great deal has been achieved, as you have described. I recognise that the Executive has moved things forward by setting aspirational targets, by adopting a broad philosophy that has provided a direction of travel and by bringing together coalitions of people. However, I wonder whether either now or in the near future we need to think again about the role that government—especially the Executive—should take in moving us on to the next stage of development.

It strikes me, from much of the language that has been used, that although the mechanisms that have been established are necessary, they will not be sufficient to get us to where we need to go. For example, we have heard today about things such as the need for Government to give a clear signal to its partners. Most witnesses who have appeared before the committee have recognised FREDS as a useful forum for bringing people together, but it does not have teeth.

I appreciate that the extent to which this question can be answered may be limited—although if it can, it would be useful to hear any timescales that could be given—but should the Government perhaps consider being a bit more hands-on and interventionist in the coming period in order to take us to the next stage, at which we can deliver on those aspirations and exploit the potential that has been discussed today? Being hands-on and interventionist could take a number of different forms, such as developing market incentives, perhaps in conjunction with the UK Government, or providing more direct and traditional forms of Government intervention.

**Lewis Macdonald:** If you are asking whether we want to acquire the DTI's capital grants facility, the answer is no. We seek to position Scotland as the leader in renewable energy within the United Kingdom, but the overall framework for that involves us in an active and effective partnership with the DTI and the UK Government.

As members will acknowledge, there are boundaries to the Scottish Executive's responsibilities and many aspects of energy policy are reserved. However, the Scottish Executive has the key tasks of promoting renewables and promoting energy efficiency. In themselves, those things give us significant levers, which we want to utilise in the best way possible.

We are currently doing two or three different things. We are using the renewables obligations as a mechanism to stimulate the market. We are also working with FREDS to bring together the partners. The energy institute that is just getting under way will play a significant role in enabling that partnership to develop. It should be borne in mind that the energy institute will have a budget of several million pounds; it will receive £5 million for each of the next 10 years. The additional money that we will be able to supply as a result of the changes in the Energy Bill will also be very significant.

We recognise that policies must be pursued actively in order that we deliver but, without wishing to sound complacent, I think that the policy mechanisms that we have put in place are the right ones at this stage. However, we must keep those under review to ensure that they are delivering. For example, we are currently consulting on extending the additional benefit of the renewables obligation for renewables production beyond the 10 per cent or so that it will reach by 2010, towards 15 per cent or so by 2015. We are consulting on that because we think that such a change might well provide additional impetus for those who are making investment decisions now and in the next couple of years and who will look that far ahead. We will keep the mechanisms that are place under review, but the right approach is the strategic approach, along with partnership between industry and the UK Government.

**Susan Deacon:** I am grateful for that answer. I am sure that you and your officials are seized of the need to keep up momentum.

What more could be done to ensure that there is a similar buy-in to and contribution to moving forward in this area across the Executive? I will take one example that has come up this afternoon, which is the point that Sarah Boyack made about building standards. That could have a huge impact by accelerating the pace of development if certain firm decisions were made. Is there anything that you would like to add about that? I am sure that when the committee completes its final report we will want to say something about it.

**Lewis Macdonald:** Yes, and I acknowledge the significance of that area. You might be aware that Scottish building regulations were reviewed in 2002. They are now the best thermal insulation

standards in the UK and are comparable with the best in Europe. That is useful. A further review of those standards will begin next year and it will consider what encouragement the building standards might provide on incorporation of renewable features. Both Sarah Boyack and Chris Ballance raised that subject, and I am glad that Susan Deacon has given me a third opportunity to make the point because it is significant and is part of our general drive towards improved energy efficiency across the board.

You might also be aware of the announcement that Jim Wallace made on Friday about investing in energy efficiency in the public sector. That is part of obtaining recognition from colleagues in other parts of the Executive and other public services that they also have a role to play in energy efficiency. That ties in with renewables; we see those as two parts of the same policy drive.

I should mention that we will soon be consulting on our green jobs strategy, which will address the employment potential of renewables, recycling, energy efficiency and other sustainable technologies, and the potential that they have to deliver jobs throughout Scotland. That will be a matter for the ministers who are responsible for enterprise and the Scottish Executive Enterprise, Transport and Lifelong Learning Department, as well as all my colleagues.

**The Convener:** I wonder whether that new building down at the foot of the Royal Mile will comply with those standards.

**Lewis Macdonald:** I could not tell you with any precision whether it will. However, that matter was considered carefully at an early stage. When we get to the building, I hope that we will find that it is energy efficient. Jamie Stone is probably far better placed than any of us to answer that.

**Murdo Fraser:** This question will probably warrant a quick yes or no answer—I live in hope.

The renewables obligation target is 40 per cent of capacity, but I want to address the other 60 per cent. As you know, most of our non-renewable power generation is reaching the end of its useful life. Even if we meet that 40 per cent target, where will the other 60 per cent come from? Is not it inevitable that the nation will need new nuclear capacity? Should we start planning for that now?

**The Convener:** That is clearly a yes/no question.

**Lewis Macdonald:** I will resist the temptation to give a yes or no answer to that. Murdo Fraser will be aware of the work that has been done by the Radioactive Waste Management Advisory Committee, which works across the UK to address the disposal of nuclear waste. In due course, decisions on the appropriate way forward will be



made on the basis of that work. I will go no further than that on this occasion.

**The Convener:** I thank the minister and his officials for their evidence. It has been a long session, but it has been useful.

I propose to move on swiftly with the agenda because we can complete it expeditiously.

## Broadband Inquiry

16:10

**The Convener:** Agenda item 2 continues our inquiry into broadband in Scotland. The Public Petitions Committee has referred to us petition PE694, which deals with the availability of broadband services and happens to be an e-petition. We have before us Alan Kennedy, who initiated the petition. Would you like to make a brief opening statement?

**Mr Alan Kennedy (Machars Broadband Action Group):** I am probably unique as a witness in that I appear to be the only member of the public coming before the committee who has been involved as a complete novice in the tortuous process of trying to bring broadband to a rural community from scratch. Last September, I set up a small action group to try to get broadband to my area. We considered the British Telecom option, but decided that it was better to go for wireless. Since then, we have learned a lot and are now at the point at which we have identified and selected a broadband service provider and are working very hard to convince business and home users to sign up for the service. We expect to succeed shortly in the Whithorn and Isle of Whithorn areas, which will in turn act as drivers for the other areas that are targeted.

Our campaign has been hard work because there is absolutely no template for any group attempting to do what we are doing. My action group had, using its own private resources, to develop broadband technical appraisal systems, produce pre-qualifying questionnaires to assess the various suppliers, both technically and commercially, and work out tender evaluation processes to ensure fairness, value for money and so on. I give great credit to Scottish Enterprise's information technology manager in Dumfries and Galloway, who has nurtured, encouraged and advised us all the way.

Our group is a founder member of the south-west Scotland wireless broadband users group and is actively involved in helping other regional communities get through the various set-up processes without their having to go through our painful learning curve. As of last week, Moffat is wireless-broadband live. Other communities, such as Kirkconnel, Thornhill and Sanquhar are close behind.

Drawing on our experience, while remaining mindful of all of the evidence that has been submitted to the committee so far, I will raise some key points that are particularly pertinent to the process of getting broadband.

The take-up of broadband throughout Scotland, even in areas that are able to receive it, is low. I believe that part of the reason for that lies in the lack of a clear Government broadband strategy that makes everyone aware of where we want to be and what broadband can do for us. Until business and home users install broadband, they do not appreciate it or, more important, gain value from it. I have yet to hear of anyone regretting the fact that they have installed broadband. The oft-quoted remark by some that 98 per cent of Scots will eventually receive broadband, as if that were the final answer, irritates me because that will leave 100,000 potential users in some of the most disadvantaged areas—such as mine—abandoned in the communications stone age.

Despite the fact that all the various bodies that are responsible for publicising and promoting broadband tell us how well they are doing, the fact remains that, for those at the broadband sharp end—particularly in rural areas—the centrally developed messages have been poorly delivered and badly co-ordinated. Time and again, I have been told that the current television campaign for broadband simply increases frustration. It neither teaches nor informs and should be withdrawn as soon as possible.

The current pamphlet that is issued by the broadband for Scotland initiative is little more than an advert for BT and needs a complete overhaul to reflect other opportunities fairly and in a balanced way. Conversely, I praise highly the role of the broadband bus from Glenrothes, which is a great idea that really helps. We need about 12 more such buses to get the broadband message across. Attendance on the bus should be compulsory for people in local government posts who clearly have not yet got the message that it is time to assist the process.

16:15

My written submission makes the point that if people want broadband, the worst thing that they can do is register with BT. A recent problem with BT in my region served only to make me think that there must be a better way—there must be a way that encourages competition and that allows small local networks to compete on even terms with BT. We have already heard that BT's charges for leased lines are prohibitively expensive. I wonder why. A similar situation arises with masts that are owned by mobile phone operators, BT and others, which could aid alternative service options but which are disappointingly costly to buy into.

Eventually, and in the general way of things, broadband will become part of our lives, as the road and rail networks became a vital part of daily life nearly 100 years ago. However, time is of the essence. The haves-and-have-nots broadband

gap already exists in my region. Our outlook is stark, but broadband gives an opportunity to assist communities to survive, develop and—I hope—expand. Without it, opportunities will disappear and we will fall further behind. I commend my petition to the committee. I hope sincerely that the inquiry will help to bring about the action that is necessary to achieve my petition's aims.

**The Convener:** I suggest that, paradoxically, the problems that you complain about have actually had a beneficial effect in your case. An organisation has been put together that has delivered substantially for the local community, not just through what it has delivered but through community involvement, whereas, if big brother in Edinburgh or London had simply provided everything on a plate for you, there might have been fewer benefits. Is there any truth in that?

**Mr Kennedy:** There might be. I do not claim a great deal of credit for what my action group has done and I still feel that if we had had better support in getting across the message that broadband is not just about faster internet access, we could have done much better. We have canvassed the public through posters, public meetings, the radio, the press and by knocking on their doors, but I am constantly amazed—when reports come to me from the public—by how little people know about the benefits of broadband. We need a different approach from the centre to help communities such as mine appreciate the benefits and to make broadband happen.

**The Convener:** Who has signed up to your service? Will you describe a cross-section of your users and what they use the service for?

**Mr Kennedy:** We have a good cross-section of society. The Machars area that I come from is primarily rural, but there are lots of small businesses such as bed and breakfasts. We have Wigtown, which is the national book town, and other small businesses are starting up in the region. Many of those businesses use the service to demonstrate to their customers in the UK and abroad that they are up to date with the latest technology and are prepared to use it.

One of the problems that we have is in getting people to accept that the service does not stop with faster downloads. People sometimes fail to appreciate that they can download security patches—we have to be concerned about security these days—and software programmes that may assist in their work. People can tap into an amazing array of things on the internet. Many people say that they would do more, but they are frustrated by waiting for 20, 30 or 40-minute downloads. I am convinced that I would have had more signatures on my petition if people could have got through. If we are to encourage rural communities to promote small businesses and let

them thrive, we have to offer them something like broadband.

**Chris Ballance:** Good afternoon. I understand that it is in order to wish you a happy birthday. First, how much will the service that you are going to offer to the residents of Whithorn cost and how will that compare to the cost of the service offered by BT? Secondly, you said that community involvement is a key factor. Could you tell us a little more about that?

**Mr Kennedy:** Certainly. I will deal with the cost first. We went to a variety of service providers and whittled them down to a shortlist. The cost of the system that we are recommending is comparable with BT's—it is £30 a month for a home user and £40 a month for an enhanced service for business users, which compares pretty favourably with BT. The first reports from Moffat indicate that the download and upload data ratio is better than with BT, so we are pleasantly surprised with what we are finding.

It is interesting to note that, in assessing some of the tenders to get the best price, we found some very good offers. We perhaps did not choose those tenders for other reasons, but we found that independent service providers could offer pensioners a special rate of, say, £6 a month. All sorts of customer-friendly ideas were built in that we have not been able to detect in the current BT promotion, so there is quite a lot of mileage there. We believe that ours is a competitive offer. Given the take-up in Moffat, Whithorn and other areas, it seems that businesses and home users think so as well.

**Chris Ballance:** Given that a community action group that was founded on the energy of one person can be so successful in producing a regime that challenges BT on cost, what is the role of central Government?

**Mr Kennedy:** The role of central Government is not only to allow and assist action groups such as mine to form and survive but perhaps to communicate how we do it. I have worked on these issues since last September. That has been demanding, and in many ways it has been great fun, but I do not intend to go out and tell the rest of Scotland how to do it. I am sure that there are communities out there that could benefit from our knowledge. If that sort of information was spread around, we might see more wireless networks springing up. Wireless is a fast-moving technology; there seems to be a new advance every month enhancing its capability.

You mentioned how the community aspect helps. Let me give you one example of how the community can help to get broadband. In one of the towns in my area, we had a lot of trouble convincing users that they should go for

broadband and so far their numbers have not been sufficient to bring in a wireless network. However, across the estuary lies another small community, which also has an interest in broadband. If it had been possible to link the two communities together in a wireless network, the whole operation would have been made commercially viable. However, the problem lay in the fact that the second community had allowed all its interested people to register an interest with BT. It called a public meeting to say, "We're not going to get enough numbers for BT, but here's another wireless option." Three people turned up. Unfortunately, people in the community do not know who is registered with BT, so they cannot go out and reclaim the names.

I have made the point time and again that, if there was a centralised register of people who have an interest in getting broadband, BT and other independent service providers could tap into it. A common experience has been that, once the names have gone to BT, it is great if the trigger figure is reached but, if it is not, people have to start all over again. That is one of the biggest problems.

**Christine May:** The point that I wanted to raise has already been raised by Chris Ballance. I welcome your support for the Glenrothes bus. Coming as it does from my constituency, it is of course something of great excellence.

**Mike Watson:** Mr Kennedy, you say in your paper that pressure must be brought to bear on BT, of which you are quite critical in a number of ways, to make broadband technology available at lower cost. Representatives of BT were here last week giving evidence. I do not know whether you saw their paper or read the *Official Report*.

**Mr Kennedy:** I saw it briefly this morning.

**Mike Watson:** They demanded unequivocally that 100 per cent of exchanges be enabled and they wanted Executive assistance in doing that. They said that a public-private partnership would be needed for the final 5 per cent—or whatever the percentage was—of coverage of Scotland. They seemed to be alive to the issues that you are talking about. The issue is not just about costs; it is also about working with others in the partnership that BT talked about. Do you think that, in time, that is likely to cover the sort of problems that you have identified in areas such as yours?

**Mr Kennedy:** Let me answer that from a slightly different angle. Most of us understand the BT trigger figures, but we need to consider how communities reach those figures. There are stories, which I am sure are not apocryphal, of people standing outside supermarkets taking down names and addresses to get the magic 500 or whatever. That is great for making the BT

trigger figure, but it does not convince those people who have signed up, and who would probably sign up for a Red Cross appeal, that broadband will benefit them. The message about broadband must be much wider and simpler, so that we can get everyone involved.

It is not surprising that the BT take-up on broadband is so low. Having got the trigger figures, BT put in systems, but half the people did not know what they were signing up for in the first place. I also query whether BT is focused on getting out into smaller communities, which will not be reached by the signal because it is 6km down the wire or where the population is such that there are perhaps 100 users of a small exchange. From a layman's point of view, I do not hear that that is something that BT is focusing on. In other words, I do not have confidence. I would like to have confidence and I would like to tell the people in my area to have confidence, but I do not get that message yet.

**The Convener:** You said that you did not want to make a career out of evangelising the rest of Scotland with that message, even though there might be some sense in doing that. Has Scottish Enterprise Dumfries and Galloway suggested that there might be mileage in relating or translating that experience elsewhere?

**Mr Kennedy:** Scottish Enterprise Dumfries and Galloway was instrumental in helping us to set up the south-west Scotland user group, so we now have representatives from Moffat and will shortly have representatives from Thornhill and Sanquhar. We are all helping one another with the process of assessing the system that is being offered to us and deciding whether it is sensible for people to take it up. We are making it up as we go along, because there is no template for what we are doing, but I think that we are now gaining a fair bit of expertise. I would like to see that expertise spread but, as I said, I do not intend to do this across the whole of Scotland. It has been a very demanding exercise in my area, but I think that what we have done could be done elsewhere.

**The Convener:** I do not think that we have any further questions, but your evidence has been helpful. Some of your written material was critical of BT, but what was more interesting for us was the positive side of what you said and the need to encourage the public and tell them about the potential that exists. Those are questions that we have been pursuing with the various witnesses who have been before us. It is not enough simply to offer the technology as if it was the latest kind of microwave; its benefits also have to be sold. Thank you very much for your evidence, Mr Kennedy. We shall take account of it as part of our inquiry.

## Procedures Committee Inquiry

16:30

**The Convener:** Agenda item 3 relates to an inquiry that the Procedures Committee is holding into the timescales and stages of bills. I received a letter from Iain Smith asking me whether I wished to respond to the inquiry about the speed at which bills progress through the Parliament. Although this committee does not have much involvement with bills, I know that committee members have been involved with bills in various capacities—some of us as ministers, at least one of us as the member in charge of a member's bill and others of us sitting on committees that have considered bills. Does anyone feel that they wish me to respond in a certain way to the Procedures Committee or are members content to leave the matter to other committees that handle more bills? I am open to suggestions.

**Murdo Fraser:** This is just a personal view, but it may be shared by other committee members. I feel strongly about the timing for stage 3 amendments, especially as we do not have a second chamber. Stage 3 amendments are often lodged at the last minute; members have to consider them, form an opinion on them and vote on them in a short timescale and the bill becomes law almost immediately thereafter. It seems to me that the time limits for consideration of stage 3 amendments could do with being extended to allow greater scrutiny.

**Chris Ballance:** I have been lobbied by people in various parts of civic society who would appreciate time to be able to comment on an amendment before it is dealt with by the Parliament. If there is only 24 hours' notice, only an MSP can comment. If there were wider notice, that would be appreciated.

**Brian Adam:** Having had experience in 2000 of dealing with the Housing (Scotland) Bill at stage 2, I feel that a longer period needs to be set aside if there are a large number of amendments. Perhaps the Parliamentary Bureau should give the committee more flexibility to extend the timetable if there are a large number of amendments. During the passage of the Housing (Scotland) Bill, large numbers of amendments were lodged both by the Executive and by members of the Social Justice Committee. In such circumstances, we do not get proper scrutiny at stage 3, although at that stage we tend to see only those amendments that the Executive has flagged up at stage 2.

I take Murdo Fraser's point that the timescale for lodging amendments is worth considering. Given that we are a unicameral Parliament and that we

take a pre-legislative consultation approach to scrutiny, we must give more time to the longer and more controversial bills and to those bills that attract both Executive and non-Executive amendments at stage 2.

**Mike Watson:** It is probably indiscreet for me to get involved in discussions on unicameral legislatures versus bicameral ones, but I, too, would like to make a point about stage 3, which is linked to what Murdo Fraser said. My concern is not so much about the timescale for lodging amendments and the extent to which they are open to comment, although I accept that a sufficient period is necessary and I endorse the points made by Murdo Fraser and Chris Ballance; my point is about the stage 3 debate itself.

I have felt on a number of occasions that the amount of time available for dealing with amendments in the chamber on the day is unsatisfactory and I have said so on the record. It seems that if members are lucky enough to have an amendment dealt with early in the day, they may get three or four minutes in which to speak. If their amendment is not dealt with until the end of the process, they may be asked by the Presiding Officer simply to move the amendment formally, yet that amendment could be just as important as the amendment that was moved earlier in the day by another member. I would like a balance to be struck between people deliberately filibustering to stretch things out and finding time to deal properly with stage 3 amendments.

There may be a link to the process that has been referred to of lodging amendments, but my view is that, if we need a second day or a second half day to deal with amendments at stage 3, that time should be found, because that is the end of the process. How we make the distinction between needing more time and people deliberately talking things out—heaven forbid that we should have such a process in this legislature—I do not know, but I would like the Procedures Committee to consider whether there is a way of improving the situation, bearing in mind the time pressures on business in the chamber.

**The Convener:** I sympathise with that view. At the report stage in the House of Commons, it does not matter so much that there is a guillotine, because we know that the bill will go to the second chamber. In the Scottish Parliament, however, that is the last chance gone. I do not think that the Scottish people are ready for us to suggest a second chamber just at the moment—

**Chris Ballance:** With a second building.

**The Convener:** Far less a second building.

We shall take those points on board and include them in a letter to the Procedures Committee.

*Meeting closed at 16:35.*



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