

ECONOMY, ENERGY AND TOURISM COMMITTEE

Wednesday 13 May 2009

Session 3

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ENERGY INQUIRY2079

ECONOMY, ENERGY AND TOURISM COMMITTEE **15th Meeting 2009, Session 3**

CONVENER

*Iain Smith (North East Fife) (LD)

DEPUTY CONVENER

*Rob Gibson (Highlands and Islands) (SNP)

COMMITTEE MEMBERS

Ms Wendy Alexander (Paisley North) (Lab)

*Gavin Brown (Lothians) (Con)

*Christopher Harvie (Mid Scotland and Fife) (SNP)

*Marilyn Livingstone (Kirkcaldy) (Lab)

*Lewis Macdonald (Aberdeen Central) (Lab)

*Stuart McMillan (West of Scotland) (SNP)

COMMITTEE SUBSTITUTES

Nigel Don (North East Scotland) (SNP)

Alex Johnstone (North East Scotland) (Con)

Jeremy Purvis (Tweeddale, Etrick and Lauderdale) (LD)

David Whitton (Strathkelvin and Bearsden) (Lab)

*attended

THE FOLLOWING ALSO ATTENDED:

Nigel Don (North East Scotland) (SNP)

THE FOLLOWING GAVE EVIDENCE:

Jamie Hume (Scottish Government Business, Enterprise and Energy Directorate)

Colin Imrie (Scottish Government Business, Enterprise and Energy Directorate)

Sue Kearns (Scottish Government Business, Enterprise and Energy Directorate)

Jim Mather (Minister for Enterprise, Energy and Tourism)

CLERK TO THE COMMITTEE

Stephen Imrie

SENIOR ASSISTANT CLERK

Katy Orr

ASSISTANT CLERK

Gail Grant

LOCATION

Committee Room 5

Scottish Parliament

Economy, Energy and Tourism Committee

Wednesday 13 May 2009

[THE CONVENER *opened the meeting in private at 09:38*]

10:00

Meeting continued in public.

Energy Inquiry

The Convener (Iain Smith): Welcome to the 15th meeting of the Economy, Energy and Tourism Committee in 2009. This is the penultimate session in our energy inquiry, and the first of two sessions with the Minister for Enterprise, Energy and Tourism. At this session, we intend to look at the Government's overall energy policy and the wider picture. At the next session, we will focus on some of the areas in which the committee is considering making recommendations in its final report.

I welcome the minister and his team. Before opening the floor to questions, I invite the minister to introduce his team and to make some opening remarks on what our preferred energy future should be and on the Government's energy policy and vision for Scotland's energy.

The Minister for Enterprise, Energy and Tourism (Jim Mather): I introduce David Rennie, Colin Imrie and Sue Kearns. Jamie Hume will undoubtedly be here—I suspect that the vagaries of ScotRail have snarled him up.

I welcome the opportunity to contribute to the committee's energy inquiry. As members will have discovered, this is a complex area. I am grateful for the debate and data that the committee has generated to date. I apologise for the length of my statement, but it is vital to have it on the record. As members know, the issue is heavily nuanced and involves a great deal of detail.

I have read much of the evidence that has been presented to the committee and am aware that it has had a lively and well-informed discussion on Scotland's energy future. I hope that, at the very least, the committee and the Government agree on the importance of the subject to Scotland's future, to our energy-led economic recovery and to our world-leading low-carbon ambitions on climate change.

Energy is vital to keeping Scotland's businesses, hospitals and schools running and, in the case of businesses, competitive; to heating our homes; and to transporting goods and people. The energy sector is vital to Scotland's economy not only in terms of jobs, current production, security of supply and consumption but in providing Scotland with opportunities to develop and deliver the energy technology and systems that will help to meet worldwide climate change and energy security challenges. We do not underestimate the scale of the opportunities that exist, which are enormous.

As the committee knows, Scotland has remarkable renewable energy resources—up to 25 per cent of European offshore wind and tidal resources and 10 per cent of European wave resources. Overall, Scotland has the potential to deliver up to 60GW of renewable electricity resources. As members know, Scotland is already a net exporter of electricity, and it has the potential to become a major exporter of renewable electricity to the rest of the United Kingdom and further afield. That is not to mention the fact that we are exporting oil and gas. Our remarkable renewable resource can be harnessed, along with associated technology and research and development gains, to stimulate both economic growth and recovery.

In addition, with some 5.5GW of renewable capacity currently installed, consented to or under construction, Scotland is already well placed to exceed the 2011 target for 31 per cent of gross consumption to come from renewable resources. As the First Minister was pleased to announce at the beginning of May, Scotland is well placed to lead the UK and Europe on the development of carbon capture and storage, with the northern North Sea as Europe's largest potential carbon store. The list that I have given is not exhaustive, but it is vital that industry, Parliament and Government work together to seize the opportunities and to address some of the significant challenges, so that we realise the shared ambition of a vibrant, diverse and sustainable energy sector that contributes to our objective of achieving sustainable economic growth while meeting renewable energy targets and addressing climate change.

We recognise the importance of Scotland working in partnership with our neighbours in the rest of the UK, Ireland and Europe to take the agenda forward. We have much to learn from other countries, but also much to offer in resources, skills, knowledge and technology. We are aware that, for Scotland fully to meet its ambitious low-carbon energy targets, it must play a full and active role in the UK and the European Union. The saltire prize and the new Scottish European green energy centre are examples of

our readiness to lead international developments in sustainable energy.

Despite the difficult times that are affecting us all, our aim remains unchanged. Energy will play a central role, not only in delivering sustainable economic growth, but in driving our economic recovery.

As the committee will be aware, on 2 February the Cabinet Secretary for Finance and Sustainable Growth outlined 10 pledges on energy policy, to deliver a succinct and clear agenda for the sector. Today, I have published a detailed road-map for delivery, and have set out in detail how we will deliver each of the 10 pledges in a key sector report that has been sent to the committee.

The pledges give a clear, targeted and coherent approach to addressing the main energy issues in Scotland, and they give focus to the efforts of Government and its agencies. The pledges are focused on addressing both short-term and longer-term opportunities for Scotland to develop a competitive advantage and thereby contribute to economic recovery and growth and to addressing climate change. Together, the pledges represent a key component of the Scottish Government's economic recovery programme.

The key issues that are addressed in the pledges include: implementing action plans on renewable energy, renewable heat and energy efficiency; supporting clean fossil fuel technologies; the development of subsea grids; developing our oil and gas sector; and leading in green energy through the saltire prize and the Scottish European green energy centre. The overall aim is to deliver a low-carbon economy with a high-growth approach, which will have the potential to create thousands of green jobs in Scotland. We are already working to lay the foundations for economic success by investing in Scotland's natural capital and in our world-leading skills base for a greener future—a greener deal for Scotland.

I have outlined the opportunities, but I also mentioned significant challenges that we are trying to address. In addition to the 10 pledges, I therefore want to focus today on three key issues: transmission charging; the energy opportunity; and, finally, how we see the delivery of energy efficiency in Scotland.

We acknowledge that we face challenges in realising our energy potential. One challenge lies in ensuring that our existing and future transmission grid infrastructure is fit for purpose, with fair charging and balancing systems, and with a regulatory approach that encourages the development of a balanced mix of generation. There will be a significant emphasis on encouraging renewable energy in Scotland, which

will be essential if we are to meet Scottish, UK and, indeed, EU renewable energy targets. In our view, the charging systems for electricity generation need to reflect the priorities of today and the future, rather than the priorities of yesterday.

I know that the committee shares some of my concerns. The committee will be aware that the current application of locational charging for grid access levies higher charges on the generators that are furthest from the main centres of demand. The committee will agree that that represents an in-built bias in the UK regulatory system against Scotland-based generation. It does not reflect fundamental shifts towards having more generation from renewable sources, setting renewable energy targets, and addressing climate change by means such as carbon capture and storage. Accordingly, we have made the case for an alternative transmission methodology that is based on a flat-rate charge for all generators, irrespective of where they connect. We will continue to press that case, and we invite the committee to support the Government in that regard.

The committee is also aware of current proposals to introduce a locational approach to balancing constraints, and specifically to target constraints costs on Scottish grid users. The proposals have been instigated by the Office of Gas and Electricity Markets and they seek a fundamental change in the costs of addressing constraints in the grid system.

I have seen the committee's letter to Ofgem of 7 April, setting out members' concerns about the proposals to alter the arrangements for balancing charges. The letter says that Scottish generators should be able to provide balancing services on commercial terms, rather than—as proposed—at an administrative rate. In my letter to the convener of 17 April, I echoed the committee's concerns and set out the Scottish Government's firm belief that Ofgem should work to deliver a regulatory framework that promotes a fair and equitable electricity market, protects the interests of the consumer and encourages, rather than discourages, renewable energy generation in Scotland and the rest of the UK.

We are raising our concerns directly with Ofgem, and are inviting it to reconsider its approach. I am also engaging with UK ministers on how the proposed raft of regulatory changes fits with UK Government policies on renewable energy and addressing climate change. My officials are actively working with the energy sector to develop arguments against such changes. They are also working with the sector to develop proposals on how to achieve a regulatory regime that is genuinely fit for purpose, reflects the current and

future energy generation mix in Scotland and the rest of the UK, and encourages the delivery of Scotland's energy capacity, instead of having one that jeopardises the delivery of renewable energy and climate change targets, discourages investment in Scotland and adversely impacts on our overarching aim of achieving sustainable economic growth for Scotland. I invite the committee to work with the Government to achieve that aim.

Far from there being an energy gap in Scotland, developments in renewables and clean fossil fuel technologies show that there is a substantial energy opportunity. There has been real and sustained progress in the deployment of renewables in Scotland in recent years, with consent given for more than 20 renewable energy projects since May 2007, including Siadar, the first commercial wave power station in the UK. We have a strong pipeline of renewable projects in the planning and consent system. We have every confidence that our interim target of 31 per cent of electricity consumption from renewable sources can be met by 2011, and we are on track to meet the 2020 target of 50 per cent.

Fossil fuel technology projects that are in the pipeline will provide back-up to renewable generation and base-load where necessary. We welcome the recent statement by the UK Secretary of State for Energy and Climate Change about his plan to incentivise the development of carbon capture and storage. We will work with the UK Government to develop a framework that recognises the potential of developing demonstrators in Scotland as well as elsewhere in the UK. National planning framework 2 identifies sites for clean fossil fuel development, as well as the existing sites. We are consulting on planning guidance for applications to construct thermal power stations, including proposed requirements in relation to carbon emission reductions. We will make clear our final position on that in the next few months.

As I have already said, earlier this month the First Minister launched the findings of the first comprehensive study of carbon capture and storage to be undertaken in the UK. That research was supported by the Scottish Government. The report signals a milestone in Scotland's energy policy, and underlines just how vast Scotland's potential in carbon capture is. The next step is to publish a road-map, which will set out the key milestones for the development of carbon capture and storage in Scotland. The road-map is due to be published this summer.

We recognise that there are huge opportunities to improve the efficiency of our energy use, and we see that as a key element of our economic recovery plan. We have recently been accused of

treating energy efficiency as the Cinderella of the energy debate, but I do not believe that that is the case. The Climate Change (Scotland) Bill will ensure that the energy efficiency action plan will be given the priority that it deserves by this Government and by future Governments in Scotland. We intend to publish the plan by the end of the year, following final consultation in the summer.

That does not mean that we are not taking action now. We have a dedicated budget for this year and next of about £18 million for energy efficiency and microgeneration advice and support for the domestic, business and public sectors. That is in addition to the funding that is being provided for the energy assistance package and the new funding that was announced in the budget for the area-based home insulation scheme. In the past year, we have aligned the delivery of those programmes more closely to achieve more cost-effective delivery and to remove any unnecessary overlap or competition between those separate but cross-cutting policy objectives.

Much more can be done through schemes such as the carbon emissions reduction target and the community energy-saving programme to help meet our energy, climate change and fuel poverty targets. Earlier this month, I responded on behalf of the Scottish Government to the UK Government's consultation on its heat and energy-saving strategy. In my response, I outlined that, although we are supportive of the strategic approach that the UK Government is proposing, we believe that, as currently designed, the schemes will make the achievement of the objectives and targets challenging in Scotland. We are concerned that the current least-cost approach has failed to take into account the social and environmental factors that make Scotland distinct.

We have called on the UK Government to work with us to define a long-term heat and energy-saving strategy. Therefore, we support any move to create a co-ordinating body to take forward CERT beyond 2012, but the UK Government must recognise that we approach the matter differently in Scotland. We have already integrated and streamlined our fuel poverty and energy efficiency programmes and, through our Scottish CERT strategy steering group, we work closely with energy companies to boost CERT activity in Scotland. Therefore, Scotland must have a separate co-ordinating body that undertakes the work. That would guarantee that the funds that we spend on energy efficiency, fuel poverty and microgeneration were integrated with CERT-type activity.

10:15

We also acknowledge that any increase in the level of such activity would increase energy prices. Governments need to ensure that there is an accompanying strategy to minimise the impact on households that are vulnerable to fuel poverty. We expect close integration of social spend and carbon reduction activity that is undertaken by energy companies or by a co-ordinating body on their behalf to achieve that in future. That would fit with the approach that we have taken in Scotland of integrating our energy efficiency and fuel poverty programmes to maximise the impact of our spend and delivery.

The Minister for Housing and Communities shared those views in his response to the UK Government's recent consultation on CERT and CESP. The Scottish Government wants to ensure that Scotland gets its fair share of CERT and CESP activity—fair in relation to not only population but the other challenges that we face. Scotland is different: it has more rural and island communities, which are more costly to reach; it is also colder and has a larger proportion of harder-to-treat properties. For those reasons, energy suppliers are less likely to invest in Scotland and, if they do, a voluntary partnership is unlikely to deliver CERT or CESP in rural and remote communities such as those in the islands and Highlands of Scotland.

We have suggested that the simplest way to achieve at least a pro rata level of activity in Scotland would be for the UK Government to ring fence CESP and CERT in Scotland and for legislation to be put in place to ensure that CERT and CESP activity in Scotland is directed by the Scottish Government through a co-ordinating body of its choice. Our forthcoming energy efficiency action plan will outline that approach in more detail.

I hope that these introductory remarks are helpful to the committee and I look forward to discussing the various points that committee members wish to raise. The transition to a low-carbon economy will be central to Scotland's future economic prosperity. Indeed, that approach is being supported by the EU, where energy is at the heart of economic recovery proposals. Significant sums of money are potentially available to carbon capture and storage, offshore wind and offshore grid projects in Scotland that are recognised as being of European significance.

I hope that my remarks demonstrate Scotland's energy potential and the progress that we have already made in many areas. Although we have powers over many areas that relate to energy, we do not have the responsibilities in some others that we would wish for. In any event, we realise that progress relies on engagement and on

working with a range of partners. We must not only be able to work with them on areas of agreement but be prepared to issue challenges and stand up for Scotland's interests where necessary.

I hope that that is a useful summary of our approach to energy, and I look forward to discussing the issues in more depth with the committee.

The Convener: Thank you for those opening remarks. On waste, we have the reduce, reuse, recycle hierarchy. What is the energy hierarchy? What are the priorities—in order?

Jim Mather: In Scotland, we have set out a clear strategy for the future—renewable energy and clean use of fossil fuels—and have in place our 10 pledges. We are involved in long, extensive and open-ended dialogue with all stakeholders, from developers and energy companies through to environmental campaigners. That dialogue is liable to create its own self-ordering dynamic.

Since we came into office in May 2007, we have done a huge amount of examining the differences. One clear difference is that there is a range of activity across a vast array of areas, whether that is engagement with Europe or just the way in which the directorate applies resources. All of that is beginning to have an effect as we make the energy, climate change, energy efficiency and environmental aspects of the Scottish economy much more interconnected and more able to come up with the results and the optimal outcomes that we seek.

The Convener: On the issue of how you set about delivering on energy, the key sector report, which you circulated to the committee yesterday afternoon, indicates that the Government has established a Scottish energy advisory board and that the first meeting of the board took place in May 2009. Will you give a little more detail on that? Who is on the board and what is discussed? Is there anything else you can tell us?

Jim Mather: It is happening this morning.

The Convener: So it has not taken place already.

Jim Mather: It is a synchronised activity. Were I not here this morning, I would be there.

I will read out the entire list of those who are involved, from the First Minister down. That commitment from the very top is significant. Jim McDonald, the principal of the University of Strathclyde, will be co-chair of the board. He has been a pivotal figure down the years in the energy technology partnership. We also have Stephen Boyd of the Scottish Trades Union Congress; Sandy Cumming of Highlands and Islands Enterprise; Mike Farley, director of technology at

Doosan Babcock Energy, which is developing carbon capture and various other clean technologies; Charles Hammond, group chief executive of Forth Ports; Councillor Alison Hay of Argyll and Bute Council and spokesperson for the Convention of Scottish Local Authorities on environment, sustainability and community safety; Nick Horler, chief executive of Scottish Power; Andrew Jamieson, chairman of Scottish Renewables; Paul Lewis, managing director of industries and policy at Scottish Enterprise; Jim McColl, chairman and chief executive of Clyde Blowers and a member of the Council of Economic Advisers; Ian Marchant, chief executive of Scottish and Southern Energy; Brian Nixon, director of energy in Scottish Enterprise; Jack Perry, chief executive of Scottish Enterprise; Maf Smith, director of the Sustainable Development Commission Scotland; our own David Wilson, director of enterprise, energy and tourism with the Scottish Government; Malcolm Webb, chief executive of Oil & Gas UK; and Sir Ian Wood, chief executive of Wood Group.

The Convener: Thank you for that information. I do not think that you mentioned anybody who is involved in energy efficiency on that list. Is there representation on energy efficiency?

Jim Mather: Jim McDonald, Stephen Boyd, Councillor Alison Hay, Maf Smith and various others are well capable of representing that issue. I honestly believe that the First Minister's passion for that will carry through. The energy efficiency argument is very much at the forefront of people's minds. There is a clear economic opportunity, in that, during a period in which there could be fewer private sector house building starts, our construction industry might be able to flex and to channel resources into that arena.

The Convener: You have also indicated that there will be three minister-led energy theme groups. There will be one on oil and gas, one on renewables—building on the work of the forum for renewable energy development in Scotland—and one on thermal generation and carbon capture and storage. I hope that you give us more details of those in due course.

Jim Mather: We will.

The Convener: However, energy efficiency is again missing. Why is there no theme group on that?

Jim Mather: There is an issue of focus. Energy efficiency will permeate all the groups, which is perfectly right and seemly. I will chair the three groups, and I will ensure that that happens.

The key thing that we are finding with these groups—as, indeed, we are finding with the engagement that we are carrying out all over Scotland—is that the more we ensure that the

audience represents the widest spectrum of opinion and that all the issues are brought into the room, the better the outcomes that we get. I am very much interested in getting better outcomes and in listening to as many representative voices from as many different points of the spectrum as possible.

Lewis Macdonald (Aberdeen Central) (Lab): Given what you have said, I find it odd that you have not included in the Scottish energy advisory board anyone from the energy efficiency sector, the house building sector or the materials and manufacturing sector. As for generation, you have good representation from one or two sectors, but there is no representation from the nuclear energy sector, which is and will continue to be a part of the picture for a number of years.

Jim Mather: That is true, but the board is very much about looking to the future, which we have very clearly mapped out.

I take on board your comments and give you an absolute commitment that, when we begin to drill down into operational issues, energy efficiency will be at the forefront of our minds and we will engage with the parties that can guide us on that matter. I like to think that I am getting across the message that I am a systems thinker, who is trying to optimise the system. We cannot optimise any system by excluding legitimate voices that can help us, so we will include those voices in our dialogue as we move forward.

Lewis Macdonald: The broader the input from the energy sector, the better. As we have mentioned, there are a couple of fairly glaring omissions from the advisory board. We might well return to these issues in a couple of weeks' time when we speak to you again and when we have had time to absorb some of the information.

Jim Mather: We will consider your comments.

Lewis Macdonald: Like you, I am fully in favour of optimising systems. In two of the three areas in which you have ministerial-led theme groups, we already have very effective bodies, such as the UK-level PILOT task force for oil and gas and, at a Scottish level, the forum for renewable energy development in Scotland. What relationship will the new advisory board have with those two organisations?

Jim Mather: It will feed into what is going on. Last year, David Rennie and I ran an event in your home town of Aberdeen that included a three-hour session with 40 representatives of the oil and gas industry. They were very much engaged and we had a highly energised meeting in which we built up a common picture of issues and potential. A couple of days later, we had a meeting with PILOT at which we gave feedback on that session. Of course, many of the people who had been in the

room for the session in Aberdeen were also at the PILOT meeting. The fact is that in Scotland we have a number of new approaches that are bringing energy to PILOT.

That becomes clear when we compare and contrast our session in Aberdeen with the PILOT meeting. In Aberdeen, we had a theatre-style set-up, we secured people's engagement and we finished with about 100 flipcharts' worth of information that was pretty well structured and which was fed back to members within 48 hours. At PILOT, we sat at a long, narrow table and it was clear that when people left they would be aware only of the task force's reaction to the two issues that they had raised, with not much clarity beyond that. Some of the things that we are doing in Scotland will help to inform the overall situation, and we are more than willing to share that information with PILOT and others. After all, we can learn from ideas that are being proposed in the south, in Wales and in Northern Ireland.

Lewis Macdonald: I hear what you are saying. Having attended PILOT meetings, I understand how the process works. It is a forum in which industry and Government come together around the table to discuss both reserved and devolved issues. In that regard, I am curious about how the advisory board's establishment will affect your role in PILOT, the Scottish Government's relationship with the industry in that wider forum and the leadership that FREDS has successfully delivered over the past five years. Will the role that FREDS plays in renewables change as a result?

Jim Mather: It will mean that I will attend PILOT meetings even better informed. We have been closely involved with the broad spectrum of the energy industry and with PILOT in relation to oil and gas. I recently attended the Houston offshore technology conference, supporting individual Scottish members and getting a lot of information from them, and I have attended UK Trade and Investment events and heard from a first-class panel of global significance about what is happening.

10:30

We will be better informed. In essence, getting involved in those sub-tribes of the energy super-tribe is a good mechanism for keeping us all up to speed, energised and interconnected. There are spin-offs across the board. Yesterday, I took a proposition to DEVEX 2009 in Aberdeen on how we can use spin-offs from one discipline in another. For example, North Sea expertise on oil and gas can help us in offshore wind and in carbon capture and storage. The key thing is that we are keen to try to avoid duplication, to create more opportunity and, essentially, to help the whole energy sector in Scotland to become more

interconnected, because that brings huge dividends. The great compliment that we can all take on board—as a Parliament, as a Government and as a committee—is that we have energised a sector in which businesses really want to engage with us and with one another.

Lewis Macdonald: You have described how you see that relationship developing in relation to oil and gas. What is the intention in relation to renewables, for which you have ministerial responsibility? Will it be FREDS or the energy advisory board that is the leading force in Government-industry relationships?

Jim Mather: They are all part of a whole. I am always a bit nervous of using the word “or”—it is such a small word; I prefer the word “and”. Together we can build a situation in which we start to use the energy advisory board, which clearly has more structure now, as a vehicle to ensure that there is a transfer between the individual sub-sectors.

Lewis Macdonald: But surely the industry needs to know the answer to the “or” question? If the renewables industry wants to know where to take a steer on Government policy, does it go to the energy advisory board or to FREDS? Which one will give it that steer?

Jim Mather: The function is really an issue of bandwidth. FREDS focuses exclusively on renewables, so it crunches through a huge amount of data. I would expect FREDS and the industry to escalate an issue up to the energy advisory board as and when that is the right thing to do.

Lewis Macdonald: So FREDS will report to the energy advisory board.

Jim Mather: That is overformalising the situation—it is unhelpful to put it in that way.

Lewis Macdonald: This is clearly new information for the committee, but it is important that we understand what you envisage the relationship between FREDS and the energy advisory board to be. If FREDS is not reporting to the board, what is the relationship?

Jim Mather: The relationship is a component of us all being involved in trying to optimise the energy sector in Scotland. That parity of esteem, that joint-and-several approach and that ability to specialise and focus on a narrower remit all add to that dynamic. I am happy for it to evolve on that basis.

Lewis Macdonald: Perhaps we could hear more about your vision of the structure of how that relationship will work when we next speak to you, because I am uncertain as to how you envisage it working.

Jim Mather: I hear and respect your view on that. We will ponder what you have said and return with feedback, having considered the matter internally. I am out there day and daily seeing the good will that exists in the energy sector towards optimising it for Scotland's benefit and the enlightened self-interest of the players. I am confident that people are working towards a unifying goal of increased sustainable growth in Scotland; I am keen that we do that in a way that encourages the most collegiate and collaborative approach possible. Putting the energy advisory board in place helps rather than hinders that, to a huge extent.

Lewis Macdonald: It was helpful to have your opening introduction and something of an overview of policy.

Jim Mather: Taken on board.

Lewis Macdonald: In September, your officials presented us with an overview of energy policy and it is my understanding that you are revising that and looking to bring forward an updated version of that overview of energy policy. When might that be available to the committee?

Jim Mather: It will come forward in due course and will be very much informed by the committee. The committee is doing a lot of valuable work and we need to take account of that and other consultations and activities that are also taking place. I do not think anybody who has been an observer of energy in the UK or globally would say anything other than that it is a constantly evolving position.

Six or seven months ago, offshore wind was an interesting strand, but now it is very much mainstream. I experienced the evolution of the information technology sector. In 1972, there were 28 mainframes in Scotland; IT is now pervasive and it is all interconnected. You probably have more computing power on your person than was clearing the cheques for the Bank of Scotland in 1972 and that device of yours is connected to everything on the planet.

Christopher Harvie (Mid Scotland and Fife) (SNP): It has not done the Bank of Scotland a terrible amount of good.

Jim Mather: That may or may not be the case. I would take issue with you on that. We have done very well in the past with silicon glen, from which we have a big legacy of expertise, but I do not want to deviate or digress. The key point is that we must keep our finger on the pulse of a very rapidly evolving sector, in which the Parliament, the Government and the committee are having a big impact on the evolutionary process.

Lewis Macdonald: I appreciate the point. Do I understand that you do not expect the refreshed

version of the overview to be available in the next two or three weeks?

Jim Mather: Not in the next two or three weeks.

Lewis Macdonald: It is simply to understand whether that will inform our considerations.

Jim Mather: It is important that we take on board where the committee is at on that.

The Convener: It would be helpful for the committee to have a breakdown of the remits and responsibilities of the advisory board and the theme groups, so that we can be clear how they and FREDS fit into the whole picture.

Jim Mather: FREDS is clearly the renewables theme group—let us get that on the record. That is the role of FREDS, so it is a major continuity factor in the overall energy strategy.

Lewis Macdonald: Do I understand correctly that when the press release talks about a renewables theme group led by a minister as part of the energy advisory board, it is actually talking about FREDS?

Jim Mather: Yes.

Lewis Macdonald: I do not think that it says so.

Jim Mather: We are saying that now and we will make it clear—it is the baby in the bath water.

The Convener: Perhaps the minister could write to the committee to clarify the remits and the responsibilities of those bodies. That would be very helpful.

Jamie Hume (Scottish Government Business, Enterprise and Energy Directorate): On the last point, although the minister was unable to attend the last FREDS meeting, the proposal was discussed at that meeting in those terms.

Gavin Brown (Lothians) (Con): I return to the theme of energy efficiency. When the convener asked you about the hierarchy of energy needs, you did not mention energy efficiency. When asked about the hierarchy, every witness who has given evidence to us mentioned energy efficiency first. I take what you say about your seriousness about this, but what has been the Government's response to the Audit Scotland report on energy efficiency? It was pretty scathing about central Government in particular, in which only 36 per cent of departments had any energy efficiency plan and in which emissions increased over a period of two or three years. If the Government is going to show leadership, what actions is it taking in response to that Audit Scotland report?

Jim Mather: I understand that that report has been taken very much to heart and that we can expect to see actions to remedy it. It is not a core

function of my portfolio, but we expect to see that addressed and I look forward to that happening.

Colin Imrie (Scottish Government Business, Enterprise and Energy Directorate): There has been correspondence between the Public Audit Committee and the permanent secretary on the follow-up to the Audit Scotland report. An undertaking has been given that the follow-up in relation to the public sector will be part of the energy efficiency action plan that is being prepared. At the first meeting of the high-level delivery group involving public sector partners both within and outside the Scottish Government, including COSLA and the non-departmental public bodies, it was agreed that that body will work with the team that is preparing the energy efficiency action plan to ensure that the approach that is taken will deliver the objectives that are set out in the Audit Scotland report.

Gavin Brown: It would be helpful for the committee to have sight of any correspondence or plans.

We have considered the issue of an energy efficiency action plan and have given our views to the Government in the context of the Climate Change (Scotland) Bill. However, in the written submission that you sent us yesterday, you state that you published an outline of an energy efficiency action plan in April. I got mildly excited about that and had a look at the outline that had been published, but I was a little disappointed. It is, at most, 150 to 200 words. Under the heading "Public sector", your outline is "Brief overview" and "Existing ... actions". Under the heading "Community Sector", your outline is just

"voluntary sector and community action".

Under the heading "Business sector", your outline is "Brief overview" and "Existing and new actions".

I am not sure whether that merits the title of "outline". Can you put something more in front of the committee before you next give evidence? If energy efficiency is at the top of the energy hierarchy—I assume that you accept that proposition—can you give the committee something better than what is not really an outline before you next give evidence to us?

Jim Mather: That will be on 27 May, which is two weeks away. I am sure that we can submit something by then. Colin Imrie can perhaps say more about it.

Colin Imrie: The outline that was published on 3 April set out the actions that would be taken to draft the energy efficiency action plan. We do not have an energy efficiency action plan sitting on the shelf. That work is under way and a new team is in place to put that together. As the minister has stated, the process involves the preparation of a

more detailed document for active consultation with a range of parties in the summer, including the high-level public sector delivery group, to which I have referred. A more detailed outline will then be worked up by the end of the year. The aim is to have the plan published by the end of the year. However, I am sure that we can give the minister some material to send to the committee to provide more detail on what will be in the document that will be published for consultation. It will not be the full document—the team is working on that as we speak—but it will provide more detail on the process.

Gavin Brown: That would be helpful. I do not expect the full document, but I expect more than a page.

The Convener: I am quite surprised by what Colin Imrie says. The process of the energy efficiency action plan has been going on since about 2004, yet we do not seem to be any further forward in having something to look at. When Chas Booth gave evidence to the committee on the Climate Change (Scotland) Bill, he said that he and his colleagues had been consulted to death on the energy efficiency action plan and just wanted some action. Why is it taking so long to produce a document that will allow the delivery of action on energy efficiency?

Jim Mather: We are working in parallel with the Climate Change (Scotland) Bill. We are keen to have a document that is relevant to and supportive of the bill.

The Convener: That does not really answer the question.

10:45

Colin Imrie: As the minister has said, a lot of material is already on the stocks. Back in 2007, there was a consultation on a strategy on energy efficiency. As we have made clear, there is already a lot of material. The challenge is to adapt it to the new requirements of the Climate Change (Scotland) Bill. An 80 per cent target calls for a radical ramping up of long-term action and of monitoring systems. Further details can be made available about the on-going work, which builds on the work that has already been done.

Gavin Brown: The issue of green jobs is critical to Scotland and the United Kingdom as a whole. Minister, you said that green jobs will stimulate the recovery and that they are at the heart of your economic recovery proposals. How many green jobs do you think will be created in Scotland in the next 12 months and in the next 24 months, which is probably the timescale of the recovery phase?

Jim Mather: That kind of forecast is challenging, to say the least. Also, I am not sure that it is

particularly helpful, because of the propensity of people on one side of the argument to trumpet overperformance against a modest target and people on the other side to claim that the target is not big enough. I think that we have enough targets. I expect thousands of green jobs to be created, and can see some early signs of that happening, even in the midst of the recession, when I look at the growth of Burntisland Fabrication, the establishment of the Arnish renewable energy project and, in my constituency, the phoenix arising from Vestas, which has been taken over by Welcon Towers.

We are seeing a great awareness of Scotland's potential and a willingness of many parties to come together. Recently, I was asked by the Crown Estate to run a session focusing on the potential of Scottish territorial waters. We are bringing together the Office of Gas and Electricity Markets, National Grid and European interests to begin to debate that. The issue of Europe is key. We have drawn the attention of Andris Piebalgs, the European energy commissioner, to the huge potential of Scotland, and that has brought dividends in terms of the money that Europe is looking to put into Scottish projects involving carbon capture and storage demonstrators and offshore wind power. The connection that we have with Georg Adamowitsch, the European grid co-ordinator, who will be a continuity figure after the European elections, indicates that we are on the European radar. Our involvement in activity that Europe deems to be strategic augurs well for jobs.

Short-term targets are not helpful, but the long-term prospects are good. The more people we get involved in dialogue with furth of Scotland, the better.

Gavin Brown: I take your point about forecasting. However, this morning, the First Minister has forecast that there will be 16,000 green jobs over a 10-year period. Do you agree with that forecast?

Jim Mather: I most certainly do. I also think that, if we think about this dramatic new industry as a whole—that is, renewables as well as carbon capture—we should expect those jobs to burgeon over time rather than conform to a traditional bell curve.

Gavin Brown: The Government is saying that it can confidently forecast how many jobs will be created in a 10-year period. However, you are saying that you cannot confidently forecast how many will be created in a one or two-year period, even though you say that those jobs are at the very heart of your economic recovery proposals. Are you saying that you think that it is credible to create a 10-year forecast but not to create a one or two-year forecast?

Jim Mather: It is not an issue of credibility but one of value. Rather than putting effort into itemising things and drawing the trajectory of a trend over time, which we would end up monitoring and defending, it is far better to get out and propagate the potential of the industry to investors and to people who want to learn by doing. That is the way to get investment and jobs on the ground.

Gavin Brown: That is one argument. However, why have a 10-year forecast in that case? What is the value in that?

Jim Mather: Because it grabs the attention and gets the message across about how enormously significant this area is going to be.

Gavin Brown: So the purpose of the First Minister's statement was just to grab some attention.

Jim Mather: No, but that was an important by-product of it. It is vital that we continue to grab attention within and outwith Scotland. That is exactly what we have been doing, and people are following those signals. For example, the £1 billion of investment in renewable energy over the past year is a direct consequence of that.

Gavin Brown: Has any work been done on where the jobs are going to come from, or is it all just about grabbing attention?

Jim Mather: The emphasis on attention grabbing is very tabloid and exceedingly unhelpful. We are trying to build a serious, material industry in an area in which Scotland has a huge comparative advantage, and the more we come together in common cause in that regard, the better. This is serious stuff. Our renewables expertise, our engineering capability and our academic knowledge give us a great comparative advantage and lead companies to invest enthusiastically in Scotland. Government and local government are pressing ahead to ensure that that happens. The process that we are discussing goes far beyond simply grabbing people's attention. Although that is important, we also have to back that up with activity on the ground, which the advisory board indicates is under way. That demonstrates the serious intent of the country—let alone the Parliament and the Government—to ensure that we crystallise the enormous potential of Scotland as the situation evolves.

Jamie Hume: I would like to add a couple of points. When I came into this job, at the end of last year—when we were talking about 50 per cent of Scotland's electricity being generated from renewables by 2020—offshore wind power was not on the radar at all. If you had asked around industry, you would have found that there was limited interest in the original proposal from the Crown Estate. Since then—in the past six or

seven months—we have been gearing up to facilitate around 6GW of power from offshore wind. The pace of change in this area and the relevance of some of the external factors are demonstrated by developments that have taken place since the UK budget, such as DONG Energy's announcement that it is going to go ahead with a major investment in the Irish Sea, and the fact that it now looks like the London array is also going to be going ahead.

The figure of 16,000 green jobs comes from Department of Energy and Climate Change economists in London, who estimated that the low-carbon sector could support a total of 160,000 new jobs. We do not have the same kind of analytical capacity as colleagues in DECC do, so we translated that into a rough estimate, based on 10 per cent of those jobs being created in Scotland. In fact, however, that underestimates the potential, because we currently have around 50 per cent of the UK's onshore wind power capacity and the offshore oil and gas capacity. Given the resource concentration in Scotland, you could say that 16,000 is a pretty conservative estimate.

We have been talking about what would happen in relation to the 50 per cent renewables target if we were successfully to bring on stream more of that offshore wind power. If we could do that, in partnership with industry and others, we could blow that target out of the water.

Having joined the policy area relatively recently, I take the perspective that, although my instinctive approach would be along the lines of looking at our long-term aims and interim targets and then how we will meet those, the pace of change—we will refer to this in the renewables action plan—is such that it makes it very difficult to create credible interim annual targets because things are moving so fast around us.

Gavin Brown: You said that offshore wind was not on the radar seven or eight months ago. Is the current round of development not being described as round 3?

Jamie Hume: The big piece that was not on the radar was the Scottish territorial waters round, which has generated interest from developers that amounts to a total potential of around 6GW. The technology is also moving forward. The Talisman Beatrice project, which first pioneered the establishment of such platforms in deep water, has started to open the way forward. For example, SeaEnergy Renewables has opened up a partnership with Energy Development Partners and others in Aberdeen. The scale of the Scottish territorial waters round is what I was referring to.

Jim Mather: Perhaps Colin Imrie can just augment what has been said.

Colin Imrie: In preparing the “Energy Sector—Key Sector Report” that was published today, we suggested the key areas that will contribute to economic recovery. In the short term—I refer to paragraph 1.4 on page 6—developments are taking place in the supply chain for energy investments, which is a key area in which work is under way. Jobs are being created in the construction and operation of new wind farms, such as those at Whitelee, south of Glasgow, and the new proposals for the Clyde wind farm. It was particularly encouraging that, when Scottish and Southern Energy received consent for its Clyde proposals, the company stressed that it hoped that at least 50 per cent of the contracts would be let in Scotland. The jobs are partly in construction, which is a significant employer at present, but there are also opportunities to work with local businesses to develop wider supplies as projects move towards operation. Those will be part of the total.

As the minister suggested, current jobs are also coming from using Scotland's existing expertise in offshore construction to develop opportunities in offshore wind energy developments. The reference is to BiFab's operations both in Burntisland and up in Stornoway, which I visited on Friday. I am very encouraged by the reopening of the Arnish yard, which—as I read in the *West Highland Free Press*—will provide up to 60 jobs. Things are moving ahead in that area. Of course, there are also opportunities at Machrihanish.

Activity is also taking place in the extra funding that is being invested in energy efficiency measures through the CERT programme. Indeed, the main focus of attention for our division last year was increasing the effectiveness of CERT spending, in terms of both its pro rata spend in Scotland and its overall spend. Following the UK Government's announcement last September that it would increase the CERT target by 20 per cent, an increase of activity will also happen in Scotland. Extra jobs will come through that, as well as from the new housing insulation scheme and the energy assistance package, which will provide increased levels of activity.

I pointed members to paragraph 1.4 on page 6 of the key sector report because it highlights the important economic benefits that will arise in other areas, particularly in new technology developments. The reference is to the estimated 10,000 jobs that will be created over the next 20 years in developing carbon capture and storage. That will provide clear benefits by safeguarding existing jobs and by creating new jobs in Scottish power stations. There are important opportunities for jobs in transportation and storage, for which the link to our offshore experience will again be important. Clean fossil fuel technology such as carbon capture and storage is an area in which we

have technological expertise, such as at Doosan Babcock in Renfrew. Therefore, we have major opportunities to grow in that sector. Of course, such expertise is also very much behind the development of technology in the marine sector.

The last area that we flag up is that, as well as creating jobs, we must deliver cost savings for consumers and business through energy efficiency improvements that will free up resources and increase demand for goods and services. We want to create economic benefit through increased activity on energy efficiency and to encourage increased activity through investment in renewable energy and carbon capture and storage. Building the technology base in Scotland will enable us to build the large companies of the future. By investing in energy efficiency, we will be able to deliver cost savings that will allow funding and resources to be spent more effectively in other areas.

11:00

The Convener: Given what Jamie Hume and Colin Imrie have said and the fact that you have said that we in Scotland are at a comparative advantage as far as renewables are concerned, why are we being so unambitious? Why are we saying that only 10 per cent of the renewables jobs in the UK will come to Scotland rather than 15, 20 or 25 per cent of them? Would it not be a bit of a failure to get only 10 per cent of the renewables jobs in the UK?

Jim Mather: The ambition is limitless. We should not set too much store by the numbers. They are conservative numbers that we can use to attract investment and wake people up to the opportunities that exist. I expect, and fervently hope, that the position will be dramatically better than that over time. That is what we are working towards. We are striving to create a situation in which more and more people are connected with, aware of and feel good will towards our efforts on renewables. That will create a climate in which we can outperform the targets. I welcome that possibility.

Lewis Macdonald: In the document that we have just received—the key sector report—you say, at the top of page 5, that there are at least 3,000 jobs in Scotland in renewable energy. Do I take it that in table 1.2 on the previous page, those 3,000 jobs fall under the “Electricity, gas and water” heading, which accounts for 16,500 jobs?

Jim Mather: That is a pretty safe assumption. Logically, that is where those jobs would sit. Perhaps colleagues can say whether they think that there might be renewables jobs in any other areas. Does what I have said seem logical?

Colin Imrie: It is logical. A problem that we faced in putting together the report is that the information is insufficient and lacking. In UK statistical analysis, the energy sector has been defined as the traditional energy sector, with the result that some of the new activity, whether it relates to microgeneration or new community activity, is not included. If I am not mistaken, the estimate of 3,000 jobs came from joint working with Scottish Renewables. That figure is not confirmed.

Over the next year, we plan to develop a much more robust analysis of the renewables sector; I know that that is being considered in the UK, too. The answer is that part of that figure falls under the “Electricity, gas and water” heading, but a lot of the jobs that exist in renewables are missed because a traditional rather than a modern definition of the energy sector is still used.

Lewis Macdonald: I have another quick factual point. The minister and Mr Imrie mentioned the jobs in Machrihanish. Has there been a net gain in the number of jobs there compared with 12 months ago?

Jim Mather: The trajectory is that there will be a net gain.

Lewis Macdonald: How large?

Jim Mather: There were 95 jobs. I think that the company concerned envisages that there might be between 200 and 300 jobs on site two years from now. In the meantime, the extension of the site will involve the creation of a large number of jobs—about 400. In addition, the company is looking at the possibility of work on the east coast.

Rob Gibson (Highlands and Islands) (SNP): Understanding the trajectory of jobs, the time that working up energy streams will take and so on would help the public. Outside here—or even in the committee—people cannot say how long it will take to achieve a mature offshore wind sector, for example. Has the minister instructed his officers to create timelines for each energy strand’s expected trajectory, so that we can see how long development will take and therefore how jobs will fit in and when the aims of each strand will be delivered? Having such a picture in each case would help us.

Jim Mather: I agree. I come from the old Peter Drucker school of thinking—if you cannot measure it, you cannot manage it. We have every intention of keeping a finger on the pulse of that matter.

In offshore wind, the indications—such as the Crown Estate’s attitude to developing the resource—are very interesting. If we look more deeply at the Crown Estate, we see that its nature is changing; people such as Rob Hastings and Dermot Grimson—ex-Shell people—appear in its

head count. The fact that individuals are moving from the relative security of the oil and gas sector into a new field is always an intriguing indicator, as is—at a human level—the indicator of Allan MacAskill leaving Talisman Energy on the back of his experience with the Beatrice field to found SeaEnergy Renewables to further develop offshore wind. As Jamie Hume said, that company is already able to sign strategic agreements with major corporations. The direction of travel is that we need to and will keep a finger on the pulse as the numbers appear, so that we can feed them back to the industry and encourage more investment as a result.

Rob Gibson: Would it help if we could see the trajectory that you expect for offshore wind and compare that with when, and at what levels, tidal energy is expected to begin to deliver? We have heard much evidence to suggest that optimum delivery from tidal will be in the 2020s, but that offshore wind could start to deliver large amounts by about 2015. There are other sectors, but mapping the timelines for those two sectors would allow the public to see more clearly where we are going.

Jim Mather: That will be an important strand in the renewables action plan. We will go down to the strands of the individual technologies, to map that information and feed it back. As sectors evolve, such plans must be more interactive and more accessible, because they must flex and change and because data will be accumulated to provide a positive feedback loop that shows that things are happening.

Jamie Hume: I will expand on how the concept plays out in the renewables action plan. Our view is in line with the idea of assessing the technologies and their development timelines. The jobs, supply chain, infrastructure and so on for offshore wind, wave and tidal could overlap a lot, so we want to create such a picture out to 2020 and beyond by technology type, to say who needs to do what by when to realise the potential and how that will fit together. Through that and through working closely with industry, we intend to develop a way of prioritising investment, so that we are clear about where the sensible plays are and at what stage to move the whole piece forward.

Rob Gibson: On a similar theme, when we have made visits, people have continually asked about the finances that are available, which are complex because they come from Scotland, UK and Europe. We do not have a clear picture of that. For example, Alistair Darling has reassured MPs that the double renewables obligation certificates arrangement that was announced in the budget will make a major contribution to tidal power. Have you considered drawing up a table to show what funding strands are available? Frankly,

funding is a maze from the point of view of people outside.

Jim Mather: I ask Jamie Hume to answer that, lest I distort the matter in translation.

Jamie Hume: The scale of the challenge has forced a realisation that traditional funding streams for this activity need to be reassessed, alongside a better appreciation of the numbers, which are enormous. For the UK to bring round 3 offshore wind on stream, the grid infrastructure alone is estimated at £10 billion or thereabouts.

The wave and tidal sector is not a bad example. The wave and tidal energy support scheme—or WATES scheme—has been successful, but in effect it fragments a relatively small amount of money among a number of individual competing companies. We need to develop an overview of the strategic things that need to come into place to enable the whole sector to be successful.

There is an appetite to develop such things. This week and last week we have been having conversations with colleagues in DECC in Whitehall, with the Carbon Trust, with Scottish Enterprise, with Highlands and Islands Enterprise, with venture capital firms, with financiers of renewable projects and with developers. There have been two questions to address. First, how much money is needed, and where might it come from? Secondly, have we got the right delivery mechanisms? How do we need to develop new delivery mechanisms for the future to incentivise the activity that we want?

Comments have been made about the pace of change. I draw the committee's attention to our approach in the renewables action plan, which is not to set in stone where we are going for 10 years, with a cast-iron plan. The experience of the past few months has shown that it is better to look at a snapshot and to recognise where we need to focus over the next 24 or 36 months, but to update and review the situation continually as we move forward.

The question of finance will be central to the fulfilment of the renewables action plan. We are working closely with developers to ensure that it is founded on the reality of their business plans and on what they need. We will consider as creatively and imaginatively as we can in this climate of shrinking public finance how, for instance, sovereign wealth funds and other potential funding streams can be levered in. Particular success has been demonstrated in attracting EU funding. Becoming part of the debate and getting over there and making the pitch is proving to be a successful strategy.

Rob Gibson: I understand what you are saying—

Jim Mather: May I just say a little more about that EU funding to get it on the record? We have been to Europe on three occasions now—separate from calls on Andris Piebalgs and from hosting visits by Georg Adamowitsch—to run sessions at Scotland house. We have invited in Eurocrats to talk about the Scottish European green energy centre, carbon capture and storage and marine energy. We are well positioned, especially now that the EU's economic recovery programme is promising up to £350 million to support projects in offshore wind, grid developments and carbon capture and storage. We are clearly on the radar, and Scotland can play a part. We will get only a proportion of that funding, but I believe that, if we work hard, we will be able to bring it into play.

Rob Gibson: I have two supplementary questions about finance. First, would you view a simplification of the funding streams as a help to the industry? Different streams have been developed at different times. We have heard about WATES being one specific pot, for example. Is there an intention to develop that, or is the intention to find a name that people can approach as a one-stop shop?

Jim Mather: The prospect of simplification in the wider context of public sector reform is something that we always have to consider. Of course we would be interested to consider that.

Rob Gibson: My second point is about the renewables action plan and the talk that there has been about the strategic infrastructure developments for marine energy, such as the early need for improved ports, harbours and manufacturing capacity—in particular, the infrastructure of ports. Is that an area in which the existing funds are adequately targeted to support early actions that will allow us to move forward into the development of the projects themselves?

11:15

Jim Mather: I am not sure that I have a comprehensive answer to that question. However, I can say that Scottish Development International, Scottish Enterprise, HIE, local authorities, harbour boards and so on have taken a very co-ordinated approach towards inward investors, working with them to show Scotland in its best light, and are orchestrating moneys to achieve that end. Indeed, one fantastic recent example is the effort made by Argyll and Bute Council to highlight the strategic importance of Campbeltown's harbour facilities to make Machrihanish more attractive to Vestas.

As I said, this is all to do with the hugely important issue of interconnectedness. We need to get all the people who can play a part proactively involved and engaged in working

towards a worthy, unifying goal that not just accrues benefit to the whole of Scotland or indeed to the economy of the local area but—as in the case of Argyll and Bute Council, which sensibly applied its own self-interest in piling in and supporting developments to Campbeltown harbour—strengthens the ability to meet people's needs.

Rob Gibson: Following your reference to Campbeltown harbour, I, too, will highlight a specific example. When the committee visited Scrabster harbour, we found that any means of using renewable cash sources for developing facilities was rather obscure. From your official position, is it clear that Scrabster, whose multipurpose harbour has an element of renewable development, can access renewable development funds from the EU or wherever else to ensure that early infrastructure developments can take place?

Jim Mather: I have found that, in dealing with such resource or infrastructure challenges, we get the best outcomes by getting all the relevant players into a room to debate the issue. Indeed, when Vestas indicated that it was going to disengage from Campbeltown, we got Vestas, other developers, engineering interests, the local authority, HIE, SDI and Scottish Enterprise into the room very early on in the process to debate the matter, ensuring that the various issues were at the forefront of everyone's minds. In such a climate, an element of organisational collaboration, co-operation and cohesion—even altruism—comes into play to ensure that we get the best result for the local and national economy. That is certainly what happened with Vestas, and I have no reason to believe that it will not happen elsewhere. It is certainly in line with my experience of dealing with the aquaculture, life science and other sectors. In fact, I have found that when we get the regulators and the regulated, for example, or planners in a room, they start to align themselves with what is best for the overall economy, and collaboration and co-operation begin to emerge.

Jamie Hume: One of the particular challenges with ports and harbours lies in developing a strategic overview, getting a real assessment of need and finding out how that need can effectively be met. Scottish Enterprise has kicked off a study on this issue, and we are in close dialogue with it, our colleagues in ports and harbours, Scottish Development International and DECC. DECC recently carried out a separate UK ports and harbours study, although, to our minds, it slightly underplayed the potential of the resource in Scotland. As I say, the first step is getting a proper understanding of what is needed to support the offshore wind, wave and tidal elements of the industry and finding out how we deliver that.

As for collaboration, which the minister mentioned, last week we met Irish colleagues and discussed opportunities for collaboration in the Irish Sea. We will reflect where we have reached in the renewables action plan, and then it is simply work in progress. Effectively, we have a further 12-month period to nail down some of the issues before the European deadline of June next year, when the UK renewables action plan will appear.

Rob Gibson: That is helpful news.

Sue Kearns (Scottish Government Business, Enterprise and Energy Directorate): You suggested that there needs to be more simplification on the regulatory side. I argue that things need to be more complex, to support technologies that have not yet received adequate support. The banding of the renewables obligations reflects the need to support emerging technologies. Next year there will probably be a feed-in tariff to support schemes of up to 5MW, to encourage community schemes. Following that, there will be a renewable heat incentive, because at the moment heat does not get any support under the RO. There needs to be more complexity to bring in technologies other than large-scale electricity generation.

The Convener: The Institution of Mechanical Engineers has estimated that there is a £40 million funding gap towards the end of the process of moving from early-stage, academic research to working full-scale prototypes. The process was supported partly through the £13 million WATES scheme, which is now fully committed. There seems to be nothing following on from that for new projects. Is the Government considering whether a phase 2 of WATES is needed to fill the £40 million gap that has been identified?

Jim Mather: As Sue Kearns mentioned, the position on ROCs is now different. The funding gap for rolling out IT back in the early 1970s was also enormous. The difference with renewables is that there is a real demand for energy and there are existing major players. ROCs are in place as an incentive; there are many indications that industry is responding to that. I expect to see the gap filled as we move forward out of this recessionary period and things start to crank up again.

Yesterday I was up at DEVEX, in Lewis Macdonald's territory of Aberdeen. People are monitoring the oil price closely. Lately there has been a movement in stock markets, perhaps in anticipation of something better in 12, 15 or 18 months' time; oil prices are clearly having an impact. When oil prices came way off the boil, falling from \$147 a barrel down to \$30-odd a barrel, Andris Piebalgs in Brussels saw that as a window of opportunity to press ahead. He has honoured that pledge by ensuring that the EU

recovery plan is skewed towards renewable energy. That will have the benefit of bringing in private sector funding.

The sum associated with the saltire prize is relatively small, but it is significant for a prize of that nature and has been a real attention grabber, with the support of *National Geographic*. Now 100-plus projects, from 24 countries, want to be involved. The prize has created an interesting dynamic—*National Geographic* has broadcast it to 650 million people, making Scotland synonymous with renewable energy and bringing us on to the radar screen. We take out that message whenever the Parliament is in recess. I have taken it to Canada and its provinces, many states in the United States, Norway, Russia and Brussels; all of Europe has been involved. Scotland was at the core of sustainable energy week back in February. Uniquely, we ran sessions at the event, and people came flocking to our door—we had 120 or 140 Eurocrats in the room engaging with Scotland. The message will also get out to financiers and developers.

The Convener: That was a long way of saying no.

Marilyn Livingstone (Kirkcaldy) (Lab): I will concentrate on some of the evidence that we have taken on the scale of the challenges. It has come over clearly to me that everybody is on board with the ambition but people are concerned about delivery. How do you see the timelines? Will you let us know some of the targets and how we will deliver them? I will ask you a couple of specific questions about that.

Jim Mather: Are you asking me specific questions?

Marilyn Livingstone: No, I am asking you overall how you think the Government is doing on delivery versus ambition and then I will ask you some specific questions.

Jim Mather: Looking at the totality, there is a marked increase in the level of consents that we are putting through. We have consented 21 projects that total 1.55GW, which is about twice the going rate of consents under the previous Administration. When we drill behind those data and examine what is happening at a local authority level, we see material data: about six months ago, I saw something that said that local authorities had 180MW built in their territory and a further 910MW consented in the pipeline. That works in parallel.

In the Government, we have reorganised ourselves to ensure that we can handle that level of consents. The head count of personnel who are involved in energy—represented by the four officials who are with me—has doubled from 30 to 60. That function has moved from being a subset of the enterprise portfolio to two distinct divisions:

a renewable energy division and an energy markets division. We are engaging with Europe, academia and industry, and we are integrating our activity with that of colleagues in climate change, housing, the environment and transport. We are taking a team Scotland approach and trying to attract people in.

The matter is hugely complex, but the more we make it interconnected and broadcast the importance that we attach to it, the more people of good will become involved, see opportunities for themselves and see a means to achieve their own ambitions.

Marilyn Livingstone: Some witnesses, including the Scottish Council for Development and Industry, have said that they would like policy objectives that focus on what prevents delivery and what we can do to unblock it. That is one side of the argument. I take on board what you say, but it has not been reflected in some of the evidence that we have heard. I will bring up BiFab, as you have mentioned it a few times and because it is in Burntisland, which is in my constituency. John Robertson from BiFab gave evidence to us last week. Talking about foundation types, he said:

“What is the thinking behind the Government investing £50 million to come up with a design when we already have the technology, the design and the manufacturing?”

When Rob Gibson asked him,

“In that context, has Scottish Development International, UK Trade and Investment or the Scottish Government asked you whether it can help?”

his answer was,

“There is a lot of interest in the yard, and there are tremendous opportunities for the yard”,

but, other than support from local MSPs and MPs,

“some assistance and discussion from Scottish Enterprise, and a visit from this committee, too few people have asked us what we need, how they can help, and how we can raise Scotland’s profile to ensure that we are leaders rather than at the bottom.”—[*Official Report, Economy, Energy and Tourism Committee*, 6 May 2009; c 2072.]

If there is so much engagement with stakeholders, why does a major stakeholder—BiFab—feel that £50 million is being invested in something that already exists and that it is not having the dialogue with Government that you talk about? I ask that from a constituency and committee point of view. It flies in the face of what we have been told this morning. BiFab was not alone: other witnesses have said the same.

How do we unblock the system, adopt a strategic approach and bring on board major stakeholders? It is important that we get ahead of the game and compete as leaders in Europe, but how do we do that? We have heard that it would not take much, but we must stop sitting around, discussing our reports and having other focus

groups. Let us just get on with it, get the investment in and take the lead in Europe. That is the plea that we have heard from businesses.

11:30

Jim Mather: I wonder what John Robertson would have said back between 1999 and 2007; I think that he has a different vision of things now. If we changed the question and asked him about the positives, I think that he would identify quite a few positives. I sat with him recently in Stornoway at a session that involved the council, developers, landowners and others in which we considered how we can move things forward there. I am sure that he has been at some of the energy and manufacturing brainstorming sessions. We listen to him.

We are trying our best to help in every way that we can within the constraints of state aid limitations. I refer to the connections that we are making, the house calls that I have made to Burntisland and the events that I have facilitated to bring things together. My most recent conversation with John Robertson was about trying to set up a mechanism to broker collaboration between him and inward investors coming into Scotland, such as Skykon. We have done that down the line: we have run sessions with the energy, renewables, aerospace, marine and defence industries, and two sessions with the engineering and manufacturing industries, all of which have played on and to the strengths of the Scottish manufacturing sector, which can play a full part in encouraging renewables. We are always keen to learn and do everything that we can within the rules. Most important, we are always keen to engage.

Marilyn Livingstone: Will you consider the announcement on the £50 million and perhaps come back to us on it?

Jim Mather: Absolutely. John Robertson is one of the babies in the bath water. We will always listen to him and be keen to engage with him.

Marilyn Livingstone: I will move on to fuel poverty. What steps is your department taking to move forward on the fuel poverty agenda? Where are you with that?

Jim Mather: A lot is going on. We are improving targeting with the energy assistance package, and there is new funding for the area-based home insulation scheme. On energy prices, we are supporting the Ofgem probe into energy markets. As I mentioned in my opening statement, we are trying to resolve the conflict between the CERT and fuel poverty.

We are working with the energy efficiency programme board to include a skills work stream

and feed into the action plan. We are working on everything from smart meters to the funding of the Energy Saving Trust. We are embroiled and involved in that in the most comprehensive way, but we are always keen to learn what we might do better and to get involved in the debate about what else might emerge.

The situation is remarkably fluid. There are many innovative people out there trying to come up with new ways of doing things. I was struck by the fact that a builder in the west—MacLeod Construction Ltd—recently came out on top of a profitability and doing-the-right-thing index. Essentially, it anticipated the drop in house building and moved across to replacement windows, insulation and energy efficiency work. It has hardly missed a beat in turnover and employee head count. That is an important example. I am keen on the job of the centre—including the committee and the Parliament—being to identify what is working well so that we can broadcast it, because success stories in one area can readily be replicated elsewhere.

Marilyn Livingstone: I have a supplementary question. I am concerned about the most vulnerable people. I have received evidence from my constituency about travelling people having to pay extra costs for electricity—people on meters are struggling quite hard to meet the costs that are involved. Local government and the rest of the public sector can help. What collaboration is there between your department and the local people who are trying to help the people in the greatest need?

Jim Mather: There is immense collaboration, which will only increase over time. You have put your finger on a fundamental issue in Scottish and UK society. I have recently been in touch with the Equality Trust down in London. Two people from the trust have produced a very interesting book called “The Spirit Level”, which deals with inequalities and points out how more equal societies tend to do better. The book looks into how inequalities arise and into the negative effects that can kick in as a result—such as poor health, mental breakdown, drug addiction and drink problems. All the negative effects in society can emanate from inequalities, and I passionately believe that the issue has to be tackled. How well we do that will be the mark of good corporate citizenship on the part of Government, local government and companies.

Gavin Brown: The previous Administration made good efforts to tackle fuel poverty, and the current Administration has made good efforts too. However, the statistics show that, in 2002, 13 per cent of people in Scotland were defined as fuel poor, whereas in 2007, which is the most recent year for which I have seen the stats, 25 per cent of

people were defined as fuel poor. Over five years, the figure almost doubled.

A lot of good work is going on, and I certainly applaud the Government for the work that it is doing, but if the stats for 2008 contain a figure that is closer to 25 per cent than to 13 per cent will the minister still think that the changes that he has introduced will succeed? Or do we need some kind of sea change if we are serious about meeting the 2016 target for the eradication of fuel poverty?

Jim Mather: When we talk about a sea change, we are saying, in essence, that we have to tackle the core problem. For me, the core problem has always been that we run the country on a Barnett-formula block allocation from Westminster. A major component in efforts to tackle fuel poverty will be a more vibrant and competitive economy, with more people in the workplace and more people able to build successful and fulfilling lives for themselves. We are doing all that we can to handle the symptoms and will continue to do so honourably and assiduously, but for me the current set-up is the fundamental issue.

Gavin Brown: That is quite an opaque answer, and—

Jim Mather: It is not; it is absolutely clear. We want Scotland to stand on its own, to run its own profit-and-loss account, balance sheet and cash position, and to have its own notional share value, so that it can grow incrementally the numbers of people in work—not only in renewables but across the board.

Gavin Brown: Okay, but instead of simply referring to Scotland as a public limited company, let us focus on the people who are currently fuel poor and the Scottish Government’s present powers.

Jim Mather: Sure.

Gavin Brown: Is there scope for some kind of sea change? The 2008 or 2009 figures might show that your changes are working but, if they do not, does the Government have a plan B to help us to motor towards the 2016 target?

Jim Mather: With the energy-assistance package and the area-based home insulation scheme, we are moving towards a sea change. I have some data in front of me. There is £10 million from the Carbon Trust and Energy Savings Trust; a potential £100 million a year from CERT; £60 million from the Scottish Government in the energy-assistance package; £3.5 million for community microgeneration; £15 million for home insulation schemes, with £15 million from other sources; a revolving loan scheme for small and medium-sized businesses, with £5 million invested to date; and a revolving loan scheme for the public

sector, with £24 million invested to date. That represents a sea change from what has happened in the past. However, I stress that I am still keen to handle the core problem.

Stuart McMillan (West of Scotland) (SNP): Before I come to my main area of questioning, I have a question on the energy advisory board. Is there any particular reason why Forth Ports is represented on the board and is one of the partners but Clydeport is not?

Jim Mather: If we continued with that, we would have an energy advisory board with 5.1 million people on it. Logically, that is what we want to do, in that the members are connected out to other people. I expect every player on the energy advisory board to represent other stakeholders and allies and to seek to achieve outcomes for Scotland that are in line with the unifying and worthy goal of increased sustainable growth. The aim is to optimise the potential for energy to play its part in achieving that result. I expect people to work pro bono and with an altruistic attitude.

Stuart McMillan: I am happy with that. I ask the question because the Hunterston terminal is on Clydeport's patch, so it has an interest in the issue and would want to play its full part.

Jim Mather: There is a clear vehicle. We are building a reputation for our ability and willingness to engage and listen and to get messages through to people, and we will continue to do that.

Stuart McMillan: I have a couple of questions about community schemes. By my reckoning, the first time in today's discussion that community schemes were touched on was 11.20, when Sue Kearns mentioned them. A moment or so ago, the minister mentioned community microgeneration funds, although I did not catch the figure that has been put into those funds.

Sue Kearns: It is £8 million.

Stuart McMillan: Thank you. Apart from that sum, what other assistance might be provided for community microgeneration schemes? I am thinking about not only wind generation but possibilities such as mini hydro schemes. The minister knows the topography of Inverclyde as well as I do, so he knows that the area floods greatly every year. That is a topical issue, as we will discuss the Flood Risk Management (Scotland) Bill in the Parliament this afternoon. If such schemes are proposed in the Inverclyde area, will the Government or Government agencies provide assistance to push them forward, as they can benefit communities and provide benefits in relation to flooding?

Jim Mather: I will ask Sue Kearns to augment my answer, but I can say that an interesting report was produced last year by Nick Forrest Associates

on the potential for small-scale hydro schemes. The study mapped digitally the topography of Scotland, considered the potential for run-of-river schemes that would have a negligible environmental impact and identified where such schemes could be placed. The figure in my mind is that the total potential power was 657MW.

I ask Sue Kearns to talk about the support that is available.

Sue Kearns: Under the previous community renewables scheme, we funded about 400 schemes throughout Scotland to help communities benefit from renewables. From last month, we have changed the scheme and we now have the communities and renewable energy scheme—CARES—which is administered by Community Energy Scotland. It is not just a grant scheme; it involves a network of community support officers who go out to communities to help them get the most out of renewables and to signpost funding that is available to help them.

11:45

It is not about just wind but other technologies, and it is not about just grants but trying to get the most out of the money that is available to us. We are considering, for example, the bulk procurement of kit and giving communities support right from when they have the idea through to the aftercare and maintenance of the schemes.

There is a lot of support available for communities that want to get the best out of renewables. We have a toolkit that is available on the web, which shows different models for enabling communities to get involved. You have received evidence from Energy4All on the co-op model. There are also the wind-to-heat schemes that we have supported up in Shetland, where quite a few communities have wind turbines that provide heat to village halls. There is a lot going on out there.

Stuart McMillan: Before I ask any more questions, I will check out the toolkit on the web. I was not aware that things had changed over the past month. How was that publicised?

Jim Mather: Broadly. The important thing is that Community Energy Scotland evolved out of HIE in the form of the Highlands and Islands Community Energy Company, which built up a fantastic track record. It is now a separate entity under Nicholas Gubbins and is delivering well. It can advertise and broadcast what is working elsewhere to help communities to understand what they might learn from others as well as the support that they can get from Sue Kearns and her team.

Stuart McMillan: My final question is about onshore wind power. I welcome the discussion

about onshore as well as offshore wind power, but planning applications can still be highly contentious in some communities. All stakeholders need to consider that. There is a concern that wind power developments are being planted just anywhere—for want of a better phrase—in order that the targets that have been set can be achieved. That is the wrong way to go. I am not suggesting that that is what is happening, but that could be the perception among local communities.

I am keen to find out more about the community engagement methods that the Government uses to ensure that any developments fulfil all the relevant criteria and—more important—that local communities are listened to and do not feel that a development is imposed on them.

Jim Mather: From the outset, we have said that onshore wind developments will not be sited just anywhere and at any price. We are seeking to maintain the balance and integrity of our environment. We are telling developers that if they engage and come to agreement with local communities and if they handle and engage with the environmental issues, that will create a greater propensity for developments to go ahead. When things have become problematic and difficult, we have put in additional resource to clarify matters, as we did with the Halcrow report on the Western Isles.

As the pipeline matures, there is a much higher level of engagement and a greater tendency for beneficial deals to be struck between developers and communities. We welcome that.

The Convener: I will allow Lewis Macdonald a very brief supplementary question.

Lewis Macdonald: You were able to tell Marilyn Livingstone how many renewables projects have been approved, how many megawatts they represent and how the situation compares with that under the previous Administration. Can you tell us how many renewables development project applications have been rejected, how many megawatts they represent and how the situation compares with the situation under the previous Administration?

Jim Mather: We have generated somewhat less; the exact number is not at the forefront of my brain, as members can see from the fact that I am looking through my papers.

There have been 26 determinations, and 21 consents have been granted.

Lewis Macdonald: So you have rejected five projects. How many megawatts do they represent?

Jim Mather: I would struggle somewhat to compute that, but I am sure that it is a considerable number.

Lewis Macdonald: Would it be correct to say that those projects represent more than a gigawatt?

Jim Mather: I think so, given that the Lewis situation is a factor.

Lewis Macdonald: How does that compare with the previous Administration?

Jim Mather: I honestly do not know, but we will find out and monitor it.

Lewis Macdonald: Could you let us know in advance of our next meeting? As you have given us the comparators for consents, it would be useful for us to have the comparators for refusals too.

Jamie Hume: We should be able to get that information pretty easily.

Christopher Harvie: I have some questions about the supply of technology, the ability to create it and the market. I do not know whether any of you have looked into my usual sensational reading—I get the *Financial Times* every day—and seen the ominous supplement on the future of capitalism, which has article titles such as “Uncertainty bedevils all”, which appeared yesterday.

I want to consider the options for renewables, and for energy saving, carbon capture and microgeneration infrastructure. Those things together will make a considerable financial packet, which will be big enough to distort what remains of international capital flows.

When we were in Denmark over a week ago we were surprised, although not altogether disgruntled—or, rather, discomfited—by the fact that so much of Danish renewable energy is in the hands of the state: not the Danish state, but the Norwegian and Swedish states.

We do not have a perfect market by any means—it is one in which sovereign capital plays a big part. In general terms, do you envisage an overall economic modelling of what our programme will do in a period in which uncertainty bedevils all and we do not know how capital flows will move, in Europe and globally?

Secondly, I want to explore to what extent we must negotiate with other sovereign powers, so to speak. Whether one opts for the nuclear option and comes up against Electricité de France in all its various guises or whether one goes for various forms of renewables that involve collaboration with Vattenfall or DONG Energy, we need to have a combination of economic modelling and—to put it bluntly—diplomatic options.

Jim Mather: You paint a very complex picture—basically because that is the reality of the situation. There are huge opportunities and

uncertainties, and a lot of other vested interests from other jurisdictions are at play. One thing that perhaps mitigates that somewhat is that the challenge is at a global level. It is so enormous that no one state will come up with all the answers. There is, therefore, a real appetite for collaboration, co-operation and cohesion. That is why we found that we were welcomed in Norway—as you were in Denmark—and by the Eurocrats when we went to Europe to speak during the sustainable energy week. The key issue is that we continue to engage; I have great faith in the interconnectedness here in Scotland because I see that it works, and we need to replicate that internationally.

Companies such as Vattenfall and Skykon are investing heavily in Scotland. Even EDF Energy is looking to the renewables side of its portfolio in a Scottish context, recognising that it is the best play it can make in Scotland. In the 1970s, when I was involved in the IT industry in its infancy in Scotland, those same uncertainties arose right, left and centre. The big difficulty then, which was different, was that we had to persuade people that we needed IT. There is no difficulty persuading people that they need energy, especially when it is such a patently obvious indigenous resource.

Professor John Kay recently advised me to read Eric D Beinhocker's fine book "The Origin of Wealth" in which the English biochemist Leslie Orgel is quoted. He died a couple of years ago. I would have loved to meet him. Orgel's second rule is very interesting: evolution is cleverer than you are.

In essence, we have to ensure that we get as many people as possible, including the financiers, involved in this debate. As Jamie Hume mentioned, there are still sources of funds furth of Scotland that we have spoken to and that are particularly interested in renewable energy. Given the potential we have and the reputation we are building with the saltire prize, the European Marine Energy Centre, the Scottish European Green Energy Centre and the sheer significance of our resources, I do not think that it would be difficult for us to broker that dialogue, perhaps on the back of our plans or the output from your review.

Christopher Harvie: When we come to modelling those possibilities and combinations of possibilities—I hope we do such modelling—we still have a major problem in that we produce relatively few technologists of the type that can take a very good reputation in university and basic research and turn it into production-line engineering. That seems to be an area where we could run into big problems simply because our resource could price itself out of our particular market. That leads to a question for the British Government about whether we have committed

ourselves deeply to extremely expensive defence projects that yield no public value whatsoever—I am thinking of Trident and the aircraft carrier programme, which seem to have their origins in the 1900s and no longer have any relevance.

We have one resource that has to be explored in considerable detail and evaluated: adapting the investment that already exists in the production platforms, pipelines and so on of the North Sea and seeing what of that can be used, whether by bringing onshore what is offshore, such as using combined cycle generators for district heating and power programmes, or by using the pipelines for carbon capture and transmission. There is a huge resource there that ought to be evaluated and then used as a bargaining counter.

Jim Mather: I will start with that latter point because we are particularly well served by the University of Edinburgh, Heriot-Watt University and the Scottish carbon capture and storage centre under the fantastic stewardship of Stuart Hazeldine who is getting that message across wonderfully effectively—not just in home games here in Scotland but in away games talking to Norwegians and, particularly, talking to Brussels and getting EU understanding of the significance of it.

I would say that two thirds of the speech I made yesterday to the delegates at DEVEX 2009 at the Aberdeen conference centre was on the potential for them of carbon capture and storage. They are alive to it, especially in the context of enhanced oil recovery.

12:00

The wonderful, heartening thing that I have come across is that in each of our sectoral sessions with manufacturing—in which the rooms have been full of people from industrial sectors such as textiles, life sciences and chemical sciences—each representative has been keen to get their message across to schools about how exciting, rewarding and fulfilling a career in their sector would be. The sector that probably made the most of those sessions was the combination of engineering, aerospace, marine and defence, which was interested in the possibility of offering placements to teachers, who would learn about the industry and go back and communicate that to youngsters—to get more technologists in the pipeline and maintain the Monty Finnieston crusade that has been continued so effectively by Peter Hughes.

On the technology front, we must recognise the energy technology partnership, which has brought together our university campuses. That is ramping up—250 academics and 650 technologists are now involved. I have talked to Stuart Hazeldine

and others about the backlog of people who want to go on courses on carbon capture and storage. That is manifold, material and real. I am persuaded of the defence argument versus genuine public value in a proper context.

It was interesting for us when we came into government that the First Minister's healthy focus on outcomes and the Virginia model was mirrored when we talked to senior civil servants. They had been nurturing the work of Professor Mark Moore of the John F Kennedy school of government at Harvard University, who is the author of literature on public value. What I like about Mark Moore is that he talks about public value and active citizenship, which plays to the agenda that says that the more interconnected we are, the more we are able to solve tough problems.

To get to the nub of the issue about constraints, I am a great fan of a guy called Eli Goldratt, who has developed a theory of constraints. Goldratt's argument is that when you get a group of people together, identify a worthy goal and spend time getting the flipchart to work and listing off all the constraints that are holding you back, a useful exercise is to take those constraints off the board and on to separate pieces of paper, then move them round a table—about the size of this committee room table—until you have a cause and effect diagram. You then systematically handle sore thumb after sore thumb; essentially, you hit the first one—the core problem that is causing the most secondary and tertiary effects. I will stop now in case I go back to my earlier issue with Gavin Brown.

The Convener: We are beginning to run out of time, so I will mop up with a couple of questions on important areas that we have not yet touched on.

First, do you envisage that there would be any role for coal without full carbon capture and storage? The national planning framework, for example, refers to “carbon capture ready” but in reality carbon capture ready does not do anything about capturing any carbon.

Jim Mather: Like the committee, we are very conscious of that issue—we have consulted on it and had workshops with the industry. Clearly, we will take the UK position into account. We are keen to prove the case for one of the demonstrators to be in Scotland. We will report on that in due course, particularly in the context of the report that was essentially launched by the First Minister on 1 May vis-à-vis carbon capture and storage. That is a focus of lively interest and we will make pronouncements on that once we have been properly able to distil the consultation, the workshops and the other inputs.

The Convener: We all support the demonstrator project for carbon capture and storage; the question is whether the Government will support the building of a new coal-fired power station that does not have CCS.

Jim Mather: Let us make the pronouncement in the proper phase, when we have heard all the evidence and are better able to present it back to the committee and to the people of Scotland.

The Convener: That issue is important in relation to how we deal with our energy inquiry report, so we would be interested to have an answer to that question as soon as you can give us one.

Jim Mather: Absolutely.

The Convener: We tend to focus on electricity, but it accounts for only 25 per cent of our energy use. The big one is heat. We are waiting on the renewable heat action plan emerging at some future date. What is the Government's policy on heat in general? The committee considered evidence from Berlin and Denmark on the development of district heating. Denmark in particular has used statutory powers to ensure that district heating is implemented and that no one in the relevant area can opt out of the system. In addition, people cannot send to landfill any waste that can be recycled, reused or incinerated, because such waste can be turned into energy and heat. What is the Government's policy on heat? Is it considering developing any of the areas that I have mentioned?

Jim Mather: I will ask Sue Kearns to give you details on renewable heat, but I can tell you that it will be part of the energy efficiency action plan—it will fold into that. Of course we are keen to learn from best practice elsewhere. Essentially, we want the material element of waste in the energy asset register of Scotland to be brought up to an acceptable standard and developed beyond that. I have a lovely anecdote for you in that regard. Sandy Brunton, who runs the post office in Fionnphort in Mull, now has a sideline that is every bit as significant as his main business. Last week, he installed his 74th air-source heat pump, which shows that things are beginning to happen. Sue Kearns will give you further detail.

Sue Kearns: The minister mentioned the wider issue of heat. Waste heat and district heating will be covered in the energy efficiency action plan. Renewable heat will be covered in the renewable heat action plan, which we will have out in the summer. We already have schemes to promote renewable heat in district heating and we have the Scottish biomass heat scheme. We are evaluating applications, some of which are for small district heating schemes, which we want to encourage at demonstrator scale. We have supported district

heating at a small level in our community renewable schemes, such as the heat pump scheme at Tranent. We have also given support to domestic consumers, for example for the Lerwick district heating scheme. There is activity in renewable heat and district heating.

On the renewable heat side, it is fair to say that there is probably a dearth of data on what is in the market, but we are trying to fill that gap. The Sustainable Development Commission has done work for us on baselining the market on renewable heat in Scotland. It has just produced a report for us that suggests that 1.4 per cent of all heat demand in Scotland is being met by renewable heat, which is above the UK level. I think that the UK Government was quite surprised about that. There are probably enough biomass community heat pump schemes in build now to double that percentage. We are therefore not doing too badly, but we recognise that there is a huge challenge to be met in terms of renewable heat, and we are working on it.

The Convener: Getting to 11 per cent in 10 years will require a tenfold increase, not a doubling, so there is a long way to go.

The minister mentioned air-source heat pumps. When will the Government reconsider permitted development rights in that area? I visited the Mitsubishi factory in Livingston on Monday and saw one for myself. You have to stick your ear next to the fan to hear anything. Has the minister or anyone from the Scottish Government actually visited the Mitsubishi factory to see an air-source heat pump?

Jim Mather: I have not been to the Mitsubishi factory yet, although the firm has visited us. You have marked my card on that and whetted my appetite. What is happening in Fionnphort in Mull could happen elsewhere in Argyll and Bute. Heat pumps are a live issue for debate. I am certainly keen to see a good and productive outcome from that.

The Convener: You talk a lot about people being in the room and talking about things but, in general—I am not criticising this Government in particular—Governments ad infinitum have been very bad at joined-up thinking. For example, we have holes in roads all over Edinburgh for a tram network that will have to be powered by electricity, but nobody has thought about putting district heating pipes in while the holes are in the roads.

Jim Mather: Sure. The systems thinking revolution and coming together starts with conversation, then it can move to a better place. I like to think that today's session and the work that the committee has done to date will help that process. We will certainly treat it as an on-going

task. I would like to thank you now, because I have to shoot off.

The Convener: Can I just ask a brief, final question? The membership of the energy advisory board does not seem to include you, the Minister for Enterprise, Energy and Tourism. Is that right?

Jim Mather: I think that that would be an omission, because I intend to be there.

The Convener: It is not above your pay grade, then.

Jim Mather: The membership information is probably drawn from the list of who was supposed to be there today. I was here today, so I was removed from that list.

The Convener: I thank the minister and his officials for their time. It has been a long session, but I am sure that we got a lot of useful information. We look forward to seeing the minister again in two weeks' time, when the committee will consider specific issues that it wants to include in its report.

Meeting closed at 12:10.

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