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Pàrlamaid na h-Alba

Official Report

RURAL AFFAIRS, CLIMATE CHANGE AND ENVIRONMENT COMMITTEE

Wednesday 25 April 2012

Session 4

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RURAL AFFAIRS, CLIMATE CHANGE AND ENVIRONMENT COMMITTEE
12th Meeting 2012, Session 4

CONVENER

*Rob Gibson (Caithness, Sutherland and Ross) (SNP)

DEPUTY CONVENER

*Annabelle Ewing (Mid Scotland and Fife) (SNP)

COMMITTEE MEMBERS

*Claudia Beamish (South Scotland) (Lab)
*Graeme Dey (Angus South) (SNP)
*Alex Fergusson (Galloway and West Dumfries) (Con)
*Jim Hume (South Scotland) (LD)
*Richard Lyle (Central Scotland) (SNP)
*Margaret McDougall (West Scotland) (Lab)
*Dennis Robertson (Aberdeenshire West) (SNP)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Mark Aitken (Scottish Environment Protection Agency)
Clifton Bain (International Union for Conservation of Nature)
Mike Billett (Centre for Ecology and Hydrology)
Andy Crawley (Scottish Government)
Stuart Greig (Scottish Government)
Professor Pete Smith (University of Aberdeen)
Stewart Stevenson (Minister for Environment and Climate Change)
Des Thompson (Scottish Natural Heritage)

CLERK TO THE COMMITTEE

Lynn Tullis

LOCATION

Committee Room 5

Scottish Parliament

Rural Affairs, Climate Change and Environment Committee

Wednesday 25 April 2012

[The Convener *opened the meeting at 10:00*]

Subordinate Legislation

Waste (Scotland) Regulations 2012 [Draft]

The Convener (Rob Gibson): Welcome to the Rural Affairs, Climate Change and Environment Committee's 12th meeting in 2012. Members and the public should turn off mobile phones and BlackBerrys as leaving them on silent will affect the broadcasting system.

I ask members to stay behind after the formal business so we can discuss a matter that has been raised by a committee member.

Agenda item 1 allows members to take evidence from the Minister for Environment and Climate Change on the draft Waste (Scotland) Regulations 2012. The instrument has been laid under the affirmative procedure, which means that the Parliament must approve it before its provisions may come into force. Following the evidence session, the committee will be invited to consider the motion to recommend approval of the regulations, under agenda item 2.

The committee has received a large amount of written evidence on the Government's policy statement on zero waste and the regulations themselves and has heard from witnesses at two meetings in March. Today, we will have the opportunity to explore with the minister the concerns raised by witnesses.

I welcome Stewart Stevenson and his accompanying officials and invite him to make some brief introductory remarks.

The Minister for Environment and Climate Change (Stewart Stevenson): Good morning. With me I have Stuart Greig, who is my official who is responsible for waste, and Andy Crawley, who is here to deal with any legal issues that the committee might want to explore—the regulations are quite complex in drafting terms, so I felt that he should be here, too.

I will not say too much in my opening statement, because I know that the committee has been fully engaged in the issue and in the wider zero waste agenda. I am pleased that the committee is taking such an active role in examining the regulations, because they are, without doubt, important. They represent a watershed moment in the delivery of the zero waste agenda. The actions that are embedded in the regulations will help Scotland to conserve resources, decrease its carbon footprint and take the decisions that are needed for long-term resource security. More important, the regulations will benefit local authorities and businesses, which will be able to realise the resource value of their waste.

Let me be clear: there is no status quo option. If Scotland does nothing to address the resource challenge, it will cost us all a lot, financially and environmentally. The regulations therefore aim to ensure that the quality of the recycling services that are available in the future is fundamentally better than those that currently exist.

For me, the issue is not simply about companies picking up waste; it is about providing businesses with a resource management service that can help them to use and manage their resources more efficiently. Working with industry to deliver that type of service is one of my priorities and one of the Government's priorities.

Before I hand the floor back to you, convener, I will paint in a little of the global backdrop to the regulations. The price of and demand for raw materials that we rely on are rising, driven mainly by the rising cost of energy, but also by changing consumer trends in China and other developing countries. To create a secure resource future for Scotland, I want to help Scottish companies to harness resources. The approach is about creating new manufacturing industries and skilled manufacturing jobs and, ultimately, delivering on our promises for a low-carbon economy.

The Convener: Thank you, minister.

I will start the questions. Dumfries and Galloway Council, Glasgow City Council, Highland Council and North Ayrshire Council have welcomed the extended timescales for the introduction of a ban on waste going to landfill. Have any sectors expressed concern about the timescales that are set out in the regulations?

Stewart Stevenson: The starting point on timescale is that we are the first country in these islands, and possibly the first country in Europe—although I cannot claim that categorically—that is legislating to close off the option of landfill for biodegradable waste, for example, which is the most troublesome material that goes to landfill.

We have a timescale with a number of dates in it that has been worked out carefully through talking to local authorities and businesses. In particular, we have taken account of issues that have been raised by the Federation of Small Businesses, because the change is relatively radical for small businesses, although it is radical for everyone else, too. The hierarchy in the

legislation and the dates in it seem to strike the right balance between the various interests, as far as we are aware.

We are continuing to work with bodies such as the FSB. To make the dry legalese of the regulations more accessible, we will introduce guidance that will explain to those who have to implement the regulations, in something more closely resembling plain English, what we expect of them.

The Convener: I am sure that particular issues about timescales will be raised in a minute, but we now turn to the cost of observing the regulations. Jim Hume will lead on that.

Jim Hume (South Scotland) (LD): Ian Telford of Glasgow City Council was rather concerned about costs post the three-year support period. He believed that there will be costs to councils. Has the Government considered providing further financial support after the initial three-year set-up period?

Stewart Stevenson: Each council will have a different set of challenges. For example, in Glasgow, there are issues to do with multistorey buildings of one sort or another, but those are less of an issue for Aberdeenshire Council, in whose area my constituency is largely placed. However, we must not lose sight of the fact that, if we focus on prevention and reducing consumption of materials, which is first in the hierarchy of waste, that has a potential benefit for councils, householders and businesses.

Reuse has an economic value that is largely driven by resource prices continuing to rise, as I said in my opening remarks. We then come to recycling. Businesses will want to buy the products of recycling. There are costs, which we have recognised in providing three years of support but, equally, there are opportunities for revenue streams for councils and others.

Already, new small and medium-sized businesses are being created that provide innovative new ways of playing into the agenda. That will mean that, in the future, councils will have an increasingly wide range of partners for different aspects of the waste agenda.

At this stage, we are not minded to consider extending the three-year support, but of course we will observe what happens. We must not deflect people from realising that, when changes are made, there are challenges and significant opportunities.

Jim Hume: That covers a couple of points.

The Convener: I will let Alex Fergusson come in, as he has a supplementary question.

Alex Fergusson (Galloway and West Dumfries) (Con): I have a question on cost, and I am thinking particularly of my local authority—Dumfries and Galloway Council. There might well be others in the same position, but Dumfries and Galloway Council has already made considerable investment and entered in good faith into long-term contracts that were signed off by previous Administrations and endorsed by the Scottish Environment Protection Agency to bring in a regime that creates very high diversion from landfill. In the past, the local authority has been used as a good example.

Such a local authority is going to be asked to pay a large amount of further costs to meet new targets and move to high-quality recycling rather than high diversion by making contractual change and putting in new infrastructure, new vehicles, new bins and so on. Can the Government offer any financial assistance to an authority in that situation, given the large cost that it has already incurred in recent times?

Stewart Stevenson: We talk to all the councils and to the Convention of Scottish Local Authorities as the representative body. I recognise that Dumfries and Galloway Council and, I think, one other council have specific issues, and we will continue to talk to those councils and see what we can do. The bottom line for Dumfries and Galloway, as for elsewhere, is that there is an economic benefit in changing behaviours.

In the first instance, that is about activities that are undertaken by those who put waste into the system, and the preventative strand of not producing as much food waste as we used to by buying only what we need and being cleverer about how we use things that we have not consumed. A general point is about increased separation so that what we collect from households and businesses is disaggregated into plastics, metals, paper, cardboard and so on. A lot of what happens occurs very much at the front end of that process.

We have planned a meeting with Dumfries and Galloway Council to discuss its particular issues, and we are providing funding support to help it to improve its recycling. We are not at the end of that discussion but, as I hope you have heard, I am prepared to acknowledge that the council is in a different situation because of decisions that were made in perfectly good faith in the past. There are one or two issues on that agenda in other council areas; they might not be quite the same, but the character could generally be said to be the same.

Alex Fergusson: I am pleased to hear that.

Jim Hume: I will move on from the public sector to talk about private companies and the food industry. It has been estimated that the proposed

new regulations might cost some larger hotels £18,000 every year, which is the cost of someone's salary. Has the minister or the Government considered supporting the food industry in complying with the regulations?

Stewart Stevenson: Looking at the timetable, we get to 2020 before biodegradable waste will stop going to landfill. That is a good eight years ahead, which is a reasonable period for hotels and food outlets of all sorts to prepare for the change. We used precisely that issue to determine some of the timetable.

It might be worth highlighting some of the action that is taking place. Glasgow Restaurant Association, which has 80 members, is exploring the viability of establishing a resource recovery centre and setting up its own co-operative. That is exactly the kind of innovative model that we hope to see elsewhere.

10:15

I am prepared to accept that, in Glasgow, with its density of outlets, there is a greater opportunity for collaborative working in comparatively small areas. Nonetheless, by setting a 2020 deadline, which is the last of the dates in the regulations, we have recognised that there is a period during which change will have to happen. I am confident that the industry will rise to that challenge.

Jim Hume: Just for clarification, during the transition period of eight years, which I think will be appreciated, will there be no assistance for restaurants, hotels and so on? For example, will the Government support the Glasgow co-operative initiative?

Stewart Stevenson: Support means different things, of course. If by support you mean money, that is more difficult. However, if you are asking whether we will work with the industry to help it understand how it can change, the answer is of course that we will. The guidance that will be produced in due course will acknowledge the issues that exist for significant players and will focus on getting biodegradable material out of landfill. Narrow sections of business and communities will find that a greater challenge than others. For example, it may not be a big challenge for the Parliament in our operation, but it might be a significant challenge for some of our major hotels. However, we will support them and work with them.

Jim Hume: That is quite clear. Thank you.

The Convener: Annabelle Ewing has a question on the role of the waste management sector.

Annabelle Ewing (Mid Scotland and Fife) (SNP): Good morning, minister. All the questions are interrelated and what my question is about has been touched on already: the crucial issue of developing a market for waste and facilitating the waste management sector. What position do you think that we have reached in that regard? I have made the point in previous evidence sessions that we must take into account the potential role of the third sector and social enterprises. I would have thought that they are uniquely placed to facilitate matters, particularly with respect to the cost issues that my colleagues have just raised. Will you comment on that?

Stewart Stevenson: The member is perfectly correct to highlight social enterprises as having key opportunities to contribute—perhaps particularly in smaller communities, to return to the point about differences in scale. Indeed, social enterprises are often the leaders in innovation, which we very much welcome. An example is the social enterprise called GREAN, which stands for Golspie Recycling & Environmental Action Network. It has recently been awarded funding by the Government to expand its commercial recycling in Sutherland. That is a good example that we would expect to see repeated across Scotland.

It is worth making a bigger point on the commercial industry. A number of commercial companies have already started to develop a range of new services that can be of value to people across Scotland. In an area that until the most recent election was in my constituency, Keenan Recycling has invested as much as £8 million or £9 million in various ways, including in food recycling. There is a range of examples across Scotland of such investments.

We have already seen significant changes in landfill. Historically, the money that commercial landfill operators made was from charging a fee when rubbish was brought to them, which covered the costs until the landfill site was restored and returned to other use. Now, landfill operators are exploiting ancillary services and opportunities, which deliver 70 per cent of their income. Only about 30 per cent of their income is now from the fee at the gate.

One of my officials has helpfully passed me a piece of paper highlighting another good example of a social enterprise that, now that I have been reminded of it, I recall very well. Radical Rubbish in Kirkcaldy is able to provide free collection services to local businesses in the business improvement district there because it can extract so much value from the rubbish that it collects. That is another example of the innovation that is going on. Given the kind of innovation that is going on in the commercial sector—with new players coming in with commercial services—and among existing landfill operators and social enterprises,

we should be getting quite excited about what is happening in waste.

Annabelle Ewing: Thank you for that comprehensive answer, minister.

A number of people from whom we took evidence suggested that all of this is to a great extent market driven and that we will not achieve our goal if we do not ensure that markets for the products exist. By the same token, however, I imagine that having the regulations on the table will focus people's minds; provide a clear steer and direction for potential players in the market, who will be able to see the exact direction of travel to which, I hope, we are now committing; and facilitate the creation of markets.

Stewart Stevenson: That captures the essence very well. With our deadlines and timetable, which cover an eight-year period, we are trying to create some certainty over a relatively long term and stability in our approach to ensure that investors have not only the time to make changes but confidence that there will be a stable regime to allow them to recover their costs. We think that domestic bins alone contain as much as £100 million of recoverable materials every year, so there is plenty of scope there. Indeed, significant markets for preparing materials—particularly plastics but also metals—for use are emerging.

Of course, we should not imagine that this is all totally new. During the war, for example, aluminium and paper were collected; indeed, when I was in the boy scouts, one of our staple incomes came from collecting newspapers.

The Convener: Was that during the war, minister?

Stewart Stevenson: I would not wish to fall out with the convener by reminding him that he is one of the few MSPs who are older than I am.

We have done such work before and markets can be established if the streams of material for reuse are reliable. The stable timeline and environment that we are establishing will provide a degree of confidence. I expect that other countries in the United Kingdom and further afield will look at what we are doing and perhaps follow a similar path, which, in turn, will create wider international markets for reused material.

Claudia Beamish (South Scotland) (Lab): As a quick aside, I do not wish to seem too competitive, but my grandmother, who lived to 104, used to make us unwrap our Christmas presents carefully and then fold up the paper for next year.

In your opening remarks, you mentioned new manufacturing opportunities. In what ways will the Scottish Government support, provide advice and help with training with regard to the new developments that might come from what you have called the watershed moment that we are approaching or, indeed, might already be in?

Stewart Stevenson: I know that this is terribly sad, but I have to say that my wife still collects and reuses Christmas paper.

Claudia Beamish: So do I.

The Convener: There are many examples of good practice on the committee.

Stewart Stevenson: I am glad to see a cross-party nodding of heads from the Conservatives, Labour, the Scottish National Party and the Liberals. That is absolutely first class.

To return to the matter of substance that Ms Beamish raises, we are approaching the issue in a number of different ways. Training means a number of different things, so I will break it down.

We must ensure that businesses and enterprises understand their obligations under the new regulations that we will introduce, if the committee and Parliament so permit it. The preparation of guidance is an important part of that process. We will provide a free online training course on zero waste to help identify, appropriately manage and reduce the waste that businesses generate. We will also produce a business recycling and reuse directory. There is a waste exchange tool and we produce microbusiness fact sheets. We are engaged on the issue at that level.

Another issue is that new jobs will be created. For young people in particular, we will continue actively to support the modern apprenticeship scheme, because there will be many opportunities. We have just completed a successful year, with 26,482—I am not sure about the 482, but there have certainly been 26,000—modern apprenticeships in the past year. Further opportunities will arise from the new businesses that are created as we move forward on the waste agenda.

Dennis Robertson (Aberdeenshire West) (SNP): Good morning, minister. I will explore a little further maximising the revenue from recycled products. There is a bit of controversy about the collection of products for recycling. Some local authorities permit commingling of products but it has been suggested to the committee that, to maximise the revenue, separation is perhaps the best way forward. Do you have a view on that?

Stewart Stevenson: Good morning, Dennis, and welcome to the committee. I think that this is the first time that I have attended the committee since you became a member of it.

The regulations seek to ensure that there is not commingling. The European regulations, which we

are bringing forward into Scots law through the regulations—the regulations contain other provisions, too—are clear about the need for separation. However, we recognise that, ultimately, we want to set standards on the output of material that we can reuse. We will therefore operate a derogation—partly due to our geography, because some areas face different challenges and have different opportunities—to allow a degree of commingling. The regulations clearly indicate that the standard of recyclate that comes from separation must be achieved if the derogation on commingling is operated. Commingling is certainly not the route that we want to go down.

Stuart Greig has suggested that the issue is too techie even for me—he may well be right—so he will say a little bit on the matter.

Stuart Greig (Scottish Government): The issue is quite technical. There are two schools of thought, one of which is that we should collect as much material as possible and send it to a big sorting facility, which will deal with it. The other is that we should collect material separately and maintain quality that way. We think that the right approach is probably somewhere in between; it is horses for courses. The real focus is on maintaining the quality of the materials, so we have introduced a strong requirement that, whatever system is used to collect the materials, it must be demonstrated that the recyclate is of the same quality as if the materials were collected separately. We will work with the industry to work out the quality standards, the benchmarks and how we ensure that quality is maintained.

The Resource Association said yesterday to the Department for Environment, Food and Rural Affairs that it needs to look at what Scotland is doing on this front when it considers how it regulates on the issue. I think that we are leading the way in how we are dealing with the matter.

Dennis Robertson: Will the Government produce guidance for business and the domestic user on the collection of goods for recycling, or will you leave the matter to local authorities?

10:30

Stewart Stevenson: We will produce general guidance on what the regulations mean. Although we are not clear that it should cause us any issues, we will also consider the judicial review that is happening on the English regulations, which have not been cast in the same way as we have cast ours.

A steering group involving COSLA, local authorities, SEPA and zero waste Scotland will produce a good-practice guide for household kerbside collections. That will make a significant contribution.

Margaret McDougall (West Scotland) (Lab): Why are we allowing commingling? You explained that it is partly because of our geography, but it reduces the quality of recyclate. Is there a market for that recyclate?

Stewart Stevenson: There is a market, but remember what I said. A number of topics that we have covered already touch on that point. For example, Glasgow was mentioned. There is an issue there, because the physical structures of some multistorey buildings mean that it is not easy to provide the facilities for the degree of separation that one might have if one can put a number of bins at a kerbside, for example.

There are issues but, at the end of the day, where commingling exists as a second option, we look to ensure that the outputs of that commingling will continue to allow us to produce an output of an appropriate quality. Small amounts of controlled commingling do not necessarily jeopardise the ultimate quality.

There is a significant market for a range of different quality levels of recycled material, depending on what it is used for. The UK is already a leading exporter of low-grade materials, so the regulations will make a contribution to driving up the standards, even with commingling. In the longer term, commingling will cease to be an acceptable option simply because, if we have commingling at the entry point of waste material into the system, the likelihood is that separation will be required at some other point to keep up the standards.

We are keeping the door open, but only to situations in which the resulting reusable product is of a standard that we would have if we did not have commingling.

Margaret McDougall: Dennis Robertson asked about guidance. Will the guidance be absolutely clear about when commingling will be allowed?

Stewart Stevenson: To some extent, we will wish to work with industry and local authorities. However, we are clear that, as a general approach to government, we are interested in the outcomes and, if it makes sense to have limited commingling that can still deliver consistent quality of output, we should not rule it out at this stage, when we still have commingling in practice. However, I expect that, in the long term, the economics will drive us to the situation in which commingling has all but vanished and ceases.

The bottom line is that the derogation in relation to commingling that we provide for in the regulations can be operated only if it can be demonstrated that it does not compromise the

quality of the output. It is a pretty limited derogation, but we felt the need to incorporate it, in part because of the discussions that we have had with a range of parties.

Alex Fergusson: I will return briefly to the situation in Dumfries and Galloway, if I may. As I understand it, the system there is a commingling system in that it takes the waste in its entirety and then extracts the recyclates from it. That is a mechanical and biological system that avoids the need for large-scale thermal treatment work, for example. At the end of the day, it produces two products: a high-calorific-value fuel and a compost-like output with high-quality growing characteristics.

Does the cabinet secretary agree that those outputs are in themselves a valuable resource and that the regulations should recognise those materials' carbon metric and recycling performance?

Stewart Stevenson: Thank you for the promotion.

Alex Fergusson: I beg your pardon.

Stewart Stevenson: Of course, my cabinet secretary is somewhere on the continent.

It is clear that the committee is interested in a number of technical issues, so I invite Stuart Greig to comment.

Stuart Greig: Dumfries and Galloway has a challenge with its existing facility. Mechanical biological treatment is suitable for the mixed-waste stream—the stuff that we cannot recycle properly—but it is not the technology for today, when we can create usable materials that can replace virgin materials.

An MBT facility produces a fairly low-grade compost that may cover landfill sites. In comparison, the high-quality compost from a separate food waste collection can be used to help to grow crops and so forth and to create energy. We are not talking about like-for-like substitutes.

A transition is needed in Dumfries and Galloway to find a route to use the facility there for things that we cannot recycle into high-grade materials. The council needs to think carefully about the long-term agenda of moving towards kerbside collection and getting good-quality recycling going. We are working with the council and trying to help it on that, and zero waste Scotland is working with it on thinking about food waste collections. That will be an uphill piece of work, but we will get there. A change is needed.

Alex Fergusson: You mention a long-term transition agreement. Will you assure me that a body such as Dumfries and Galloway Council, which has invested large amounts in recent years and is tied into long-term contracts, will have flexibility of transition without financial penalty?

Stuart Greig: Dumfries and Galloway Council is making the transition, which is great. It is beginning to roll out separate collections for households. We understand that it cannot change the situation overnight. We have worked closely with the council and will continue to do that, to give it help. I do not know how long the long term is—whether it is five or three years. We need to work that out and to get a plan of action in place, but the council is committed to the transition, which is a benefit.

Claudia Beamish: I have a quick query. It is reassuring for the committee to hear that it is hoped that commingling will vanish in the foreseeable future. Given your comments on climate change targets for transport, I observe that the export of low-grade commingled materials might not be an appropriate way forward.

Stewart Stevenson: I hope that I said—but I might not have said it—that the UK is a large exporter of low-grade materials today. I think that that will change. Materials will still be exported, but they will be higher-grade materials with a higher value. Of course, the export trade is of value.

We are not complacent on the subject, and what you say is correct. A key issue is that much less vehicular transport of materials to landfill will take place, which will benefit many communities as well as the climate change agenda, in which I know the member has a significant interest.

Richard Lyle (Central Scotland) (SNP): Good morning, minister. I agree with your comments about the opportunities in waste. I have suggested that waste is Scotland's second oil opportunity.

While I was out electioneering at the weekend, I met someone who is involved in waste collection. He complained that all the major firms have the contracts all tied up with councils. What are the opportunities for small firms to get involved in Scotland's new oil opportunity?

Stewart Stevenson: It is not for me to comment on councils' contracts—that is really a matter for them. However, having already referred to a number of social enterprises this morning, I should mention a commercial operation in this area, Forth Resources Management, which is another good example of a new company coming into the market. People are certainly finding niches. After all, the big traditional commercial waste companies have significant assets to manage in landfill and are simply not as fleet of foot as the new smaller companies. I certainly want to encourage the emergence of the new social enterprises that are at the lower end of the size scale and, if it is within our power to do so, to try to

provide help with and deconstruct any specific barriers that might be identified in that respect.

However, I suggest that referring to this activity as a "second oil opportunity" might be very slightly overegging the pudding. I certainly hope so, given that the prevention of waste sits at the top of the waste hierarchy. The hope is that in creating these new opportunities, the role of waste will diminish.

Richard Lyle: When you mentioned the war earlier, I realised that you were referring to the second world war. I was not born at the time myself but I know that, during that period, there was a lot of recycling and everyone had a tremendous involvement in that opportunity. I find it deplorable that people are still throwing away recyclable waste, but what are we doing to encourage everyone to increase their recycling and move us closer to our targets?

Stewart Stevenson: It might be helpful if I say, first of all, that one of the things that we will not do is penalise people financially, a suggestion that has been part of the public discourse from time to time.

To be candid, I think that there is broad-based support for domestic waste separation and dealing with waste in a more environmentally and financially responsible way. Of course, that support is not 100 per cent but nothing ever is. We will continue to cajole, encourage, support local councils in their efforts and ensure that it becomes as easy as possible for people to recycle, and we will not respond to the opportunity to penalise anyone financially. Instead, we want a voluntary approach that is firmly supported by the Government.

Graeme Dey (Angus South) (SNP): Perhaps I can develop that point a little. Given the nature of the media in this country, there might well be a lot of negative reporting on the consequences of the regulations and the demands that they might make on individuals and organisations. Do you accept that that is a probability? If so, what steps will the Scottish Government take to counter such reporting? Can we expect a very positive national campaign to back up the introduction of the regulations and promote their positive message?

Stewart Stevenson: If we had a more balanced media, there would be more people with reporter's notebooks sitting behind me in the public gallery instead of sitting elsewhere in this Parliament.

Members: Hear, hear.

Stewart Stevenson: Jolly good.

We are doing quite a lot on this matter. For example, we are running a greener Scotland campaign called "It's too good to waste" and on STV there is a series about celebrities looking at their lifestyles; indeed, I think that I am correct in saying that it was on last night. Through such amusing and engaging means, we are seeking to get people to understand the opportunities associated with this activity.

Change is never easy for anyone—we know that that is the case in our individual personal lives—but we can make it interesting and engaging. We are getting youngsters in particular engaged in the agenda. We know that, across the environmental agenda, youngsters often go home and tell their parents that they have to change, and that is pretty good.

For the committee's information, the next campaign topic in our greener campaign is food waste.

10:45

The Convener: Thank you very much.

We are trying to cover many subjects, so I want us to focus specifically on the points that we need to decide on before we think about the motion.

The next subject is recyclate values. Has the minister given any thought to encouraging local authorities to work together to achieve a better market position with the aim of selling high-quality recyclates?

Stewart Stevenson: It is clear that markets for high-quality recyclates are emerging without Government intervention in particular. I refer to what I said in answering a different question. If we can identify barriers to those markets emerging and developing, we would want to know about the difficulties to help to deconstruct those barriers.

We are taking a very good step forward in creating opportunities for markets by giving relatively long-term certainty through having an eight-year period. In essence, we are saying, "This is how this issue will be dealt with and these are the challenges that exist." That helps companies to plan, gives investors confidence and creates opportunities for small businesses. The big players in the waste industry in 10 years' time may have different names, not just because the companies may have been bought and rebranded. In providing that long-term certainty, we are doing what we need to do, but the evidence thus far is that the markets are growing without direct promotion by us.

We expect councils largely to take the lead on the matter, of course. We as a Government do not deal with the mechanical processes of waste; that is essentially a council issue. There are examples of councils that are making their own investments. Fife Council is one good example to draw to the committee's attention in that context.

The Convener: Indeed. The opportunity for councils to make income from that would be useful in this difficult time.

Councils are faced with constraints because of the reduction in and elimination of the use of landfill. Margaret McDougall will lead on that subject.

Margaret McDougall: What measures is the Government taking to ensure that a properly managed network of landfill sites is maintained as Scotland adopts the zero waste agenda?

Stewart Stevenson: That is a very important point. Obviously, we have to manage our legacy as we move towards sending much less to landfill, and SEPA is heavily engaged in that process. Perhaps there will be fewer opportunities for commercial operators to make money in the traditional ways from landfill operations, and the nature of landfill will change. There will be a move to filling with inert materials essentially, as we are taking all the biodegradable stuff out of landfills. Therefore, there will be a significant change in how landfill will operate, and the commercial operation will change.

I referred to the fact that only some 30 per cent of landfill income now comes at the gate and the rest of it comes from elsewhere. We expect to see that happen. I have just been reminded of the example of the Avondale site, where the operator is diversifying into recycling and diverting away from landfill. We expect that many of the operators will start to broaden their interests and offerings. For example, being a source of commercial advice to help a range of people to reduce the amount of waste that they produce will become increasingly important for them.

The landfills themselves and the landfill operators are slightly different things, of course, and you might wish to pursue one or the other or both.

Margaret McDougall: We have the existing landfill sites, and areas have been identified for landfill sites in future, but they might not be used because we are getting better at recycling our waste. Will that be covered in the guidance?

Stewart Stevenson: It will be up to each individual council to identify and plan for how much landfill space it will need. It is certainly the case that there will be less landfill. SEPA is heavily engaged in ensuring that landfill sites are regulated in a way that moves from their creation through their life cycle to their closure and the return of the land to other uses. It is a significant engineering task to build a landfill site. It not just a question of digging a hole and throwing things into it. At all the landfill sites that we have, SEPA is engaged in the process that I mentioned.

We might have to extend the life of some sites, which might be a preferred option compared with opening new sites. Because there will be less demand for landfill space, it is much less likely that there will be new sites. We should have the required capacity at the sites that we already have, and the nature of the material that will go to landfill in future will generally be less challenging for landfill operators and indeed the regulator, which is SEPA.

Claudia Beamish: I turn to another aspect—the diversion of waste. As you will know, in some other European countries there is a lot of thermal treatment, which is sometimes connected with energy. However, there are some concerns from local communities about that, and there are also transport issues for regional sites in relation to climate change, which you focused on earlier.

In a document from 2011, which SPICe has given us, the Scottish Government states:

> "the feedstock simply won't be available to feed large-scale plants or an extensive network of incinerators across Scotland."

Will you comment on thermal treatment?

Stewart Stevenson: We continue to stand by that comment, which we made relatively recently. The hierarchy of waste goes from preventing it by reducing consumption to preparing for reuse and recycling things into other uses, and seeking to recover energy from waste through combustion is close to the option of landfill. Relatively little ought to get that far down the chain, so the commercial opportunities will be limited. Frankly, given that there will be a shrinking supply available to plants that rely on waste as a fuel that they can combust and produce energy, it will be increasingly less attractive economically for commercial organisations or councils to make that sort of investment.

That is where we are going on the issue. It is not really a matter of Government policy, practice or regulation, although there are important issues around those. The dynamic and the direction in which we are going, which the legislation seeks to support, will mean that combustion will be of diminishing importance to us. Biologically driven power and heat generation is much more likely to be focused on small-scale local schemes that use waste wood from pulp mills and forestry operations, than on burning waste. The two methods require different technology, so there is no crossover between them.

We will be leading on that, but I suspect that people elsewhere will look at our approach as a more effective model.

Annabelle Ewing: On that point, it has been said to us in evidence that some member states are actually quite jealous of Scotland because we

will potentially manage to leapfrog a lot of what they are doing that they are not so keen on now. Admittedly, that is perhaps because we started the process later. Other countries have infrastructure in place that they have to feed by importing. In Scotland, we are much better placed, because we can bypass that and have a better approach to recycling. As I say, we understand that other countries are looking at us enviously in that regard.

Stewart Stevenson: I suspect that, as a group, we will be able to tolerate the envy of others.

Richard Lyle: On that point, throughout Scotland, there are numerous applications by various firms to councils for such plants. I take the minister's point that there is a reducing resource. We hope that we will not get to the nth degree—that point has been well made by other members.

In evidence to the committee, it was pointed out that a report by the Government in 1999 specified where facilities would be, although that was later pulled from the report. Do you agree that the Government should consider designating where such facilities should be to alleviate people's concerns? Should the Government ensure that councils that require facilities work together to use the diminishing resource to make the situation better, rather than have many companies spending thousands of pounds on applications that we all know will be turned down at the planning stage because people are rightly concerned about such facilities being near them? Should the Government designate where the sites should be?

Stewart Stevenson: We would be instinctively reluctant to make that a responsibility of Government. Decisions on planning are almost invariably best made by the people who are closest to the effects of the decisions. When I was minister with responsibility for planning, we moved sharply to the position of distancing Government from decisions on planning and from calling in applications unless there were matters of national concern. We would be very reluctant indeed to contemplate changing that.

In answer to the previous couple of questions, particularly the one from Claudia Beamish, I should have said that there are stringent international agreements and regulations on the import and export of waste. SEPA has substantial oversight of that. Perhaps implicit in Annabelle Ewing's question was the point that we simply will not have waste coming to Scotland to be burned in our plants. That is just too difficult practically, so I do not think that it will happen.

The bottom line is that, in a diminishing market, it is important that councils work together. There are good examples of that. For example, there is excellent partnership working in the Clyde valley, which I think goes across 14 councils, on matters such as flooding. We look forward to seeing outcomes on the current subject from the Clyde valley partnership. That is the approach that we want to be taken, because the people who are closest to the problem understand which solutions are appropriate. However, we will of course help in advance.

11:00

Margaret McDougall: As part of the on-going reduction in the use of landfill sites, when can we expect the Scottish Government to bring forward legislation to revoke the landfill allowance scheme, in accordance with the zero waste plan?

Stewart Stevenson: I knew that Andy Crawley was here for a reason.

Andy Crawley (Scottish Government): Work is under way on those regulations. Subject to ministerial approval, I expect them to be made later this year.

The Convener: Questions on businesses' presentation of food waste and the use of food waste disposal units will be led by Alex Fergusson.

Alex Fergusson: Minister—I will bring you back down to your appropriate level; apologies for my previous mistake—we have had a lot of representations from small and large businesses, for all sorts of obvious reasons. Will you say a little about the rationale for the requirement on the presentation of food waste in the regulations? In doing so, will you also say a little about the differentiation that is made between businesses that produce 500kg—in the modern parlance; in my language, that is a hundredweight—or more of waste a week and those that produce less than that, and the timescale for introduction?

Stewart Stevenson: We are trying to exempt certain kinds of businesses by making that differentiation. For example, a newspaper shop that has a chill cabinet with a few sandwiches in it for passing trade to buy will find that, inevitably, some of those sandwiches will reach their expiry date and will have to be disposed of. It would be excessive to apply the kind of controls to those businesses that we would apply to producers of larger amounts of waste. We are seeking to take out of the equation the large number of businesses that produce very small amounts of food waste—we can all think of examples that are similar to the one that I gave.

The limit will be 5kg in the long term, but it will be 50kg until 2015.

Alex Fergusson: It will come down to 5kg.

Stewart Stevenson: Yes.

We all have to be part of the agenda. However, we recognise that, for some businesses, the element of their business that creates that sort of waste is a small add-on to their core business, and we do not want to create an excessive difficulty for them through early action. The time period that we have chosen gives people time to move in a different direction.

Alex Fergusson: Clearly, any differentiation of that nature, even when it comes down to 5kg, will involve a great deal of voluntary buy-in. Does the Government have any idea of how it will measure the amount of waste that businesses produce?

Stewart Stevenson: It is up to businesses to conform to regulations. There is an enforcement regime associated with the regulations, but I do not expect that we will see SEPA visiting the small shop that happens to put out 7kg of waste. It comes back to education and to working with organisations such as the FSB to ensure that, as part of the services that they provide to their members, they help to guide them through this and the many other elements that are changing in the world of small business.

The Convener: Annabelle Ewing has a question about food waste disposal units and further business presentation.

Annabelle Ewing: On the general issue of food waste and small businesses, the small business representative who came to the committee seemed to indicate that, although there has been a derogation for small businesses until the end of 2015, they would welcome a lengthening of the transitional period.

Against that, perhaps we could obtain further information about when the waste prevention programme consultation will be launched. I imagine that that will help to feed in the concerns of small businesses about the cost implications. The bottom line is that food waste reduction is an opportunity for small businesses to save money, which is attractive to those that operate with very small margins—as it is to anybody else.

Will the minister comment on the issue of a potential further transitional regime versus any other actions that the Government could take to support small businesses through the process?

Stewart Stevenson: I am not minded to extend the transitional period, as the whole point of it is to provide a degree of certainty. Nevertheless, we will consult on the subject during the summer. For small businesses that operate with small margins, as for big businesses, there are opportunities in the efficient control and management of waste. Preventing waste in the first place is a key opportunity for every business and for each of us in our personal life.

The consultation will include proposals on measures to support business resource efficiency, helping Scottish businesses to gain competitive advantage; voluntary agreement with key sectors to cut waste and increase recycling; actions to promote reuse; public engagement through campaigns and community action; and ambitious targets to reduce waste arising in Scotland. We will address a range of issues in the consultation that we will initiate later this year—I stress that that is not a definitive, final list.

Annabelle Ewing: The other issue that has been raised specifically by business concerns macerators. We had strong representations from the industry lobby, which feels that the regulations are going to be hugely expensive for small business and that there are alternatives. However, we also heard evidence to the effect that there are no alternatives, not least because Scottish Water simply does not have the infrastructure to deal with the waste. In the wider picture, putting everything down the sink and into the sewer is a waste of a resource—we should be talking about resource management, not waste management. Will the minister comment specifically on the issue of macerators?

Stewart Stevenson: Many of the issues were identified in the question. The waste water directive has created issues for Scottish Water on the processing side. It is not simply a question of putting everything down the drain. Those of us who live in rural areas and have septic tanks are already operating the kind of regime that we want everybody to operate, choosing carefully what we put down the drain for practical reasons. That is an inefficient way of dealing with food waste.

The best way of dealing with it is not to produce food waste in the first place, by preparing it for reuse. For example, if my wife makes a chilli, some of it goes on the table and some of it goes in the freezer for later. If anything is not consumed, it goes in the freezer. There are a range of ways in which we can change behaviours, and that is much more important than suggesting that maceration can play a continuing or—even worse—an increasing role.

Alex Fergusson: I am sorry to draw this out, convener, but it is important. The British Hospitality Association gave us further evidence raising its major concerns about the costs that businesses will incur as a result of the regulations. In particular, it refers to food waste disposal units. There is a cost in that there will have been investment in them, and there will be a further cost in removing them once they are banned. The BHA says that it does not think that the costs have been quantified. What is your answer to the BHA? We heard other evidence along similar lines from the Catering Equipment Suppliers Association, and I

understand the reasons for its concern. What do you say to the BHA and the committee on that issue?

Stewart Stevenson: Just to be clear: the regulations do not ban them. However, it comes back to what is the best way of using the inescapable food waste. I think that, in answer to a previous question that you asked in relation to Dumfries and Galloway, Stuart Greig said that good quality material can be put back onto the fields to re-enter the food cycle. We must do everything that we can to encourage that as a way forward. Large hotel groups, for example, might be able to enter collaborations with others who will regard the groups' food waste as a valuable input to their processes to produce outputs. They should explore such commercial opportunities.

Alex Fergusson: I want to press you on one point, minister. We have a Scottish Parliament information centre briefing that states explicitly:

"Members may wish to discuss with the Minister the implications of the proposal to ban the non-domestic use of macerators".

Can you clarify that for us?

Stewart Stevenson: I invite Andy Crawley, who is master of the legalese, to comment on that, although Stuart Greig is looking horrified at that suggestion. However, we will see what Andy Crawley has to say.

Andy Crawley: Thank you, minister.

What the regulations control is the putting of food waste into a drain or sewer. The effect of that might be that it is no longer practical to use macerators, but it is perhaps an opportunity for people who manufacture macerators to consider how they might be used in waste management. If the issue is about not putting waste into a drain or sewer, it can be macerated and put somewhere else.

As I suspect the committee knows, there is a raft of issues around putting food waste down drains and sewers, and other regulatory steps may be taken to control that. Even if we did not have the provision in the regulations, it would not mean that people who produce food waste did not need to have regard to the consequences and the costs that flow from putting things down drains and sewers.

I make it clear that the regulations do not ban the use of macerators. Indeed, that would be inappropriate. The larger issue is to consider how to manage food waste, which might include treating it in various ways.

Alex Fergusson: So you accept that there is a cost to the regulations as they refer to the use of macerators.

Stewart Stevenson: I repeat that we are talking about a resource that has value, which can be diverted to other purposes—that is the tension. Almost the first thing that I said in my introductory remarks was that, with increasing demand for a limited supply of resources, the value that we can derive from reduction, reuse and recycling is rising. That is as true in this area as elsewhere.

Alex Fergusson: I am grateful for that clarification. Thank you.

The Convener: Will the minister comment on a long-established scheme in Austria that zero waste Scotland brought to our attention? The scheme has a high capture rate because hotels, restaurants and commercial kitchens are obliged to collect food waste separately. For other businesses, it is cheaper to dispose of food waste via separate collections rather than as residual waste. If there was an arrangement of that sort here, would it be the answer for many small businesses?

Stewart Stevenson: I would not wish to suggest that that would be the answer for everyone. However, we would always wish to look at international examples, just as we are apparently to be the envy of the world in our regulations. We are not so arrogant to imagine that we have every possible answer. I would certainly wish to ensure that we look at examples such as the Austrian one. If it is a good one, I am sure that we would wish to consider it.

The Convener: That is good. Thank you. We have quite a few other items to get through, so I ask for short questions and answers. Graeme Dey has questions on collections in dispersed areas.

Graeme Dey: I have three brief questions on this issue. We hear that the plan is that local authorities in dispersed areas will not be required to collect food waste from domestic households if it is not environmentally or economically advantageous to do so. Who will determine whether an area falls under that criterion? Does the derogation on the collection of food waste in rural areas offer sufficient assistance to rural authorities, given the challenges that they will face from the regulations? Will the Government seek to introduce the collection of food waste in rural areas at some stage?

11:15

Stewart Stevenson: We envisage that the collection of food waste will apply to 80 per cent of Scotland's population, although the proportion of the area of Scotland will be substantially lower. The derogation applies to what we define as rural areas. We are using the existing definition of rural areas; we are not inventing a new one.

In many cases, people in rural areas are able themselves to recycle via the dunghill at the bottom of the garden, shall we say. People who grow their own vegetables may be able to do some recycling on a small scale. We do a little bit of that with the limited food waste that we produce; I am sure that others here do so, too. There are other opportunities. In the longer term, though, the best bet is to have almost no food waste—that is what we would encourage.

Mike Russell's constituency alone has 20 inhabited islands, one of which is inhabited by a single person. It might therefore not be possible to get to 100 per cent. We must recognise the diversity of settlement in Scotland and ensure that we achieve our national objectives while allowing local solutions to be implemented where that is appropriate.

The Convener: Dick Lyle has a question on issues in urban areas.

Richard Lyle: Minister, you have partially answered my question. On the collection of food waste from tower blocks and tenements, the Government's policy statement ahead of the publication of the draft regulations suggested that the requirement on local authorities to collect food waste from high-density housing such as high rises would be removed. However, in its evidence to the committee on 21 March, the Government said that the requirement to collect food waste would include high-density housing. Ian Telford of Glasgow City Council said:

"I do not know how we will collect food from high-rise flats or tenemental properties."—[*Official Report, Rural Affairs, Climate Change and Environment Committee*, 28 March 2012; c 834.]

Are you confident that all urban local authorities will be able to comply successfully with your requirement to collect food waste from high-density housing?

Stewart Stevenson: In Edinburgh, which has many similar problems—though perhaps not to quite the same scale as Glasgow—we see what can be done. It is important that local authorities share experience, through COSLA and so on. There is evidence from the Edinburgh experience that models can be developed for collecting food waste from single buildings with dense and varied populations. We would encourage Glasgow to do that.

Richard Lyle: In my area, once we put recycling bins outside dense tower blocks, they are absolutely full. I take your earlier point about the chilli, and people wanting to use food wisely by eating it all. Is that basically what you are suggesting?

Stewart Stevenson: I would not wish to encourage people to eat all of what they currently buy, because there are other issues involved. However, it is appropriate to get a good balance between what one buys and what one consumes. There is a health agenda in there as well—perhaps too many Scots have unhealthy eating habits. Every one of us may eat unhealthily from time to time. We should not do it all the time—a little indulgence, perhaps, but not too much.

The Convener: The issue of enforcement powers was raised by Colin Clark from Highland Council.

Graeme Dey: To what extent will getting where we want to go with this issue depend on utilising enforcement powers? To that end, are the powers that are contained in section 34 of the Environmental Protection Act 1990 sufficient? Who has the power to enforce the regulations? As I understand it, that is not stipulated in section 34.

Stewart Stevenson: Environmental regulations are, essentially, the responsibility of the Scottish Environment Protection Agency. The powers and enforcement capabilities are provided for in previous legislation.

However, with commercial operators and more generally, SEPA adopts a hierarchical approach in dealing with infraction. The first intervention is to advise people that they are departing from the appropriate rules and regulations. In many cases, that is the appropriate thing to do. Such a visit might be followed by a written warning. Ultimately, SEPA has the powers to enforce regulations through court action, but it is pretty exceptional for it to have to do that. That is the process by which we will enforce the waste regulations, which are an environmental issue.

I should add that local authorities also have a role to play.

Graeme Dey: Do you see local authorities and SEPA working effectively in tandem?

Stewart Stevenson: The advice and discussions that I have had and the visits that I have made suggest that there is a good working partnership and that each side knows when to call on the other for support. If there are local examples of where that relationship is not working and it is felt that we in government can intervene to assist, we will do so, but the evidence is that SEPA has a pretty good team that is able to respond.

Graeme Dey: Confusion appears to exist, as the evidence that we took from Colin Clark of Highland Council indicated. In the guidelines that you produce on the zero waste regulations, will you make it clear to local authorities that they can be involved in enforcement, because they seem to think that they might not have a role to play in that regard?

Stewart Stevenson: In a consultation, there is almost always a catch-all question such as, "Is there anything else that you want to tell us on this agenda?" We have a working group that is engaging with SEPA, COSLA and others on enforcement, and something will come out of that. We expect the guidelines to respond to what that working group is doing and the input that we get to the consultation process that will take place later this year.

Annabelle Ewing: Concerns have been raised by some—although by no means all—of those who have provided evidence about the thoroughness of the business regulatory impact assessment. Although it was felt that it had been conducted well on a macro level, there were concerns that, on a micro level, there were certain gaps, particularly as far as catering services were concerned. Will you comment on that?

Stewart Stevenson: All that I can say is that I am satisfied that the impact assessment was drawn up appropriately and consulted on appropriately. We have certainly not formed the view that there are any substantial difficulties with it.

However, the body of people who will be affected by the regulations is highly diffuse—every household will be affected by them and the overwhelming majority of businesses may be affected by them, to some extent—so it is clear that we will need to be attentive to how they work in practice and, of course, we will be. At the same time, we will need to stick to what is in the regulations, because we want to give certainty and not tinker around with them, but we will certainly help, advise and work with people who feel that there are issues that are yet to be resolved.

Annabelle Ewing: In one respect, the calls to carry out case studies would have been difficult to meet, because each case will probably be quite different from the next one.

I am pleased to hear that the Scottish Government and, I presume, zero waste Scotland will work closely with small businesses to help them through the process. That is the key to getting widespread support for the regulations because, in the absence of support and guidance, small businesses will feel that they are having to bear the brunt of implementing a new Government policy.

Stewart Stevenson: Zero waste Scotland has provided information to the committee; I referred to that earlier. We also have a number of briefing notes of one sort or another, one of which is a zero waste Scotland support to business briefing note, which I hope will be of assistance. It makes the point that the member has just made when it says:

"Importantly, there isn't a one size fits all solution for businesses."

Given the diversity of businesses and broad reach of the regulations, it is inevitable that one has to say that.

Alex Fergusson: I want to expand on that briefly. The British Hospitality Association is adamant that the regulatory impact assessment assumes only savings and does not take into account the costs to small businesses in particular. Annabelle Ewing was quite right to say that this issue affects small businesses in particular. In taking into account the costs to the small businesses of implementation and complying with the new regulations, can you assure us that there will be some flexibility in the transitory arrangements that will allow those concerns to be addressed and allayed?

Stewart Stevenson: We have created time in the timetable. I am not minded to change that timetable because it is necessary to have certainty so that investment can be made knowing that there is such a timetable. The ban on materials that are collected separately for recycling going to landfill or incineration will come in 2014, which is a couple of years away. We think that the timetables that we have come up with provide time to work with industries—the hospitality industry being but one—and we and zero waste Scotland will support them to work through and understand how we can do it.

I do not think that I have sought to say that they will be zero costs but, in exchange for the costs, there will be substantial opportunities for financial benefit and I hope that that is the message that you take. Change can very rarely be done without some cost. We are making this change for environmental reasons, but we are doing it in a way that creates commercial and financial opportunities for many important players.

Alex Fergusson: My concern is about very small rural businesses such as exist across my constituency that are not in a position to bear any increase in costs at this time. I understand your aims and I understand that we cannot bring about change without cost. I am gratified to hear your assurance that zero waste Scotland and the Government will work with such businesses to ensure a peaceful transitory experience, if I can put it that way.

Stewart Stevenson: In the first instance we will probably seek to work through representative bodies such as the FSB. Because of the diversity of businesses, we might not be able to have someone going to every door, but we wish to respond to issues that are brought to our attention.

The Convener: The Subordinate Legislation Committee has raised a point with us. It drew our

attention to the new waste management strategy duties created by the regulations, and how the failure to discharge those duties could result in a criminal offence. How will the code of practice that is being drawn up be rolled out so that people will know how to avoid committing a criminal offence in this case?

Stewart Stevenson: Like many others, the code of practice will not be part of statute law but the courts will take it into account when considering whether there has been a breach of regulations. It is therefore part of the legal system and it will determine the outcomes of legal cases, but that is generally where these things sit and that is the intention in this case.

The Convener: How soon will it be available, given that we might pass the regulations today, if members so wish?

Stewart Stevenson: In the summer.

11:30

The Convener: Thank you.

We have covered a large area and members have given considerable thought to some of the issues. We have come all the way from saying that North Lanarkshire is the Saudi Arabia of waste power to many other areas.

I see that Alex Fergusson wants to delay us a little further. By all means, go ahead, Alex.

Alex Fergusson: I apologise, convener, but it is important that I have this question answered. I do not wish to oppose the regulations. I have a lot of concerns about them, although I am content with the answers that the minister has given so far. However, I want to raise one issue that was raised with us by the campaign for real recycling, which involves a number of bodies, including Friends of the Earth. The issue was that the collection regulations are inconsistent with the revised waste framework directive in a number of ways. Can the minister satisfy me on that score?

Stewart Stevenson: I will invite Stuart Greig to comment, if I may.

Stuart Greig: I had an interesting meeting with members of the campaign last week. They have been worried about how DEFRA has dealt with the transposition issue. Just yesterday, the Resource Association, which I mentioned earlier and which represents all reprocessors—the real recycling campaign is a kind of subset of it, as it involves some reprocessors—said publicly that it thinks that DEFRA should look to Scotland to see how we are dealing with collection, commingling and everything else. The association has seen that our approach is a model for dealing with the difficult issue of providing flexibility around collection, but in a way that maintains quality. The directive is about getting good-quality recycling materials, and that is what we want to try to do. I was heartened by the discussion that we had with them.

Alex Fergusson: Are you telling us that the campaign would now not say what it said in its evidence to us, in which it urged the Scottish Parliament not to make the draft regulations into law?

Stuart Greig: The reality is that the campaign is in a difficult position because it is dealing with DEFRA on the same issue and it cannot step back from the position that it has had for a while. However, the campaign has seen what we have been doing in Scotland. I get the strong feeling that it wants to work with us on the approach that we are putting in the regulations and not to fight it. That is definitely what is coming through, which is heartening.

The Convener: We have dealt with a lot of the details, so it is time to move to the second agenda item, which is the formal debate on motion S4M-02613, which calls on the committee to recommend approval of the affirmative instrument. I invite the minister to speak to and move the motion.

Stewart Stevenson: We have had a useful hour and a half and covered a lot of ground, so I will confine myself simply to moving the motion.

I move,

That the Rural Affairs, Climate Change and Environment Committee recommends that the Waste (Scotland) Regulations 2012 [draft] be approved.

The Convener: Do any members wish to speak?

Alex Fergusson: When I asked my final question, I indicated that I have considerable reservations about parts of the regulations. However, I believe that the aims are noble and just and I do not wish to stand in the way of the regulations. Many of the concerns that have been raised, particularly by business, have justification. I do not doubt Mr Greig, but I hope that he is right that, legislatively speaking, this is all above board and that the concerns that were raised with us by the campaign for real recycling are not justified. With those reservations, I am content that we recommend that the regulations be approved.

Richard Lyle: The minister has spoken with passion and I am impressed with his comments. I certainly support the regulations.

The Convener: As no other members wish to take part, I will put the question. The question is, that motion S4M-02613, in the name of Stewart Stevenson, be agreed to.

Motion agreed to,

That the Rural Affairs, Climate Change and Environment Committee recommends that the Waste (Scotland) Regulations 2012 [draft] be approved.

The Convener: We will record the result and confirm the committee's report on the outcome of the debate.

We will take a short break and reconvene at 20 to 12.

11:35

Meeting suspended.

11:42

On resuming—

Peatlands

The Convener: Agenda item 3 is a briefing on peatlands. We will use this as an information-gathering exercise in which we will focus on the International Union for Conservation of Nature UK peatland programme and the importance of peatland for climate change mitigation. The committee plans to take further evidence at the start of June 2012.

I invite members of the panel to introduce themselves and, in particular, invite Clifton Bain to speak about the peatland programme.

Clifton Bain (International Union for Conservation of Nature): The commission of inquiry on peatlands was set up more than 18 months ago on the basis that peatlands are massively important ecosystems. The conservation and restoration of peatlands is an existing biodiversity priority. It will secure huge carbon stores, enhance long-term water quality and provide flood control benefits. The beauty of the programme having started in Scotland—this is where we are based—is that Scotland holds a disproportionate amount of the peatland resource for the UK, with more than 60 per cent of the UK's peatland, and we are in the top 12 of 175 peatland nations. It is quite right that we are here and I am grateful to Rob Gibson and the committee for your on-going support throughout the inquiry.

The inquiry deliberately set out to adopt a consensual approach to peatland, bringing together some of—to be frank—the best scientists in the subject. We have with us representation from scientists in Scotland, and we have had fantastic support from the Scottish Government as well as its agencies. This has been a consensual and very scientific exercise—it is probably the biggest piece of scientific work on peatlands across Europe in a long time.

The outcome is that we have a strong case for supporting urgent peatland action. Spending now makes good sense, in that it will deliver multiple objectives for one price. It is better to protect, repair and conserve our peatlands than to leave them damaged. The sooner we repair them, the less the risk of deterioration, which will mean lower costs and less risk to the valuables inside them.

11:45

On climate change, under the Kyoto process, there is huge international recognition of the importance of peatlands. While we await more definitive figures from the Intergovernmental Panel

on Climate Change, it is clear that we can go ahead with peatland restoration. It is a no-loss, no-regret option and damaged peatland has a far greater global-warming impact than a restored peatland.

Scotland has strong information and survey data. The committee will hear more from the scientists, but there is a strong scientific case for conserving peatlands. We also have a strong consensual case. At the Scottish Wildlife Trust event on lowland raised bogs, which took place last week, we heard from community representatives who have been out there on the peatlands helping with the restoration work. They are positive about that activity, but are looking for help.

What are the next steps? The inquiry made some recommendations, and there is consensus among the four UK countries—I have met all the ministers with responsibility for the environment—that we need to show clear leadership, because this is a multi-agency activity that cuts across sectors. We also need an action plan, targets, clear funding—not necessarily brand new funding; it could be funding that is pooled from different strands—good communication and good knowledge exchange across the scientific community, which can be brought together in a clear and focused programme of work.

There is international interest in the work that is being done. I have just been at a meeting in Bonn with the Food and Agriculture Organization of the United Nations, which is examining peatland activity around the world and gathering examples, and I am off to the world conservation congress in South Korea at the end of the year, at which we have been given the opportunity to hold a peatlands seminar that will draw together all the examples of action across the world.

Scotland can shine in the international community. People are watching what we are up to, and there is a good opportunity for Scotland to show that it is taking action. The results of the inquiry give us the strength to go forward.

The Convener: I will not give the other panel members the opportunity to introduce themselves, but I welcome them. Des Thompson is the policy and advice manager at Scottish Natural Heritage, Mark Aitken is the principal policy officer for the Scottish Environment Protection Agency, Professor Pete Smith is from the school of biological sciences at the University of Aberdeen, and Mike Billett is the section head and Natural Environment Research Council research fellow at its centre for ecology and hydrology.

We do not expect every member of the panel to answer every question that members ask. Clifton Bain can act as a guide to who can best answer the questions.

Clifton Bain made an interesting point about the amount of the UK's peatland that we have in Scotland. Some people say that we have about 60 per cent, but others suggest that we have around 80 per cent. Can we clarify the disparity between those two figures, which have cropped up in our briefings?

Clifton Bain: One of the best briefings is the SPICe briefing on peatlands and climate change that has just come out; the figures that it uses reflect the best thoughts that have been gathered. A publication by the Joint Nature Conservation Committee estimates that there are around 2.3 million hectares of peatland in the UK, and that Scotland has approximately 1.8 million hectares of that.

The reason for the confusion is that the definition of peatland varies. The JNCC tried to be as broad as possible. Some parts of the UK measure peatlands to 40cm. In Scotland we measure to 50cm and in Europe they measure to 30cm. In ballpark terms, however, Scotland has 1.8 million hectares out of 2.3 million hectares.

The Convener: I will leave the arithmetic to others.

Graeme Dey: I will ask a scene-setting question. From what I have read, the best short-term return can be achieved by repairing slightly damaged peatland. However, the restoration of areas that are in worse condition pays better long-term dividends. If that is the case, what balance needs to be struck between those?

Clifton Bain: Just to give people a vision in their minds of the situation, I say that most of our blanket bog resource—that 1.8 million hectares—is slightly damaged. It was gripped; drains were put in during the 1940s. The vegetation is still there, but the water level has been reduced and that needs to be repaired. Such bogs are where we get the best biodiversity returns and a small carbon benefit. It is still a relatively significant benefit, but it is smaller than what happens if we go to an area that is completely eroded with bare peat and big gullies, which loses a lot more carbon. The completely wrecked peatlands are much smaller in area and much harder and more costly to repair. If we focus on those, we get a bigger carbon gain but we lose much more of the biodiversity returns. We get a much bigger biodiversity return if we work on the less damaged peatlands.

The analogy that I use is that putting a roof on a derelict ruin will reduce the huge amount of rainfall that comes in, but by repairing the leaking roof on a national museum early, we prevent the roof from getting worse and protect the treasures inside.

The point is that it is not all about carbon; we want to preserve our peat bogs because of the whole habitat. Also, if we repair a damaged bog before it gets to the heavily eroded state, we save tenfold in the costs of repair.

We need to take early action on the least damaged bogs. We also have the technology to repair the eroded bogs; 6 per cent of our peatlands are heavily eroded. Some are worth addressing, but we should also address bogs that have yet to get to that stage.

Graeme Dey: To be clear, what balance should we strike in that? It is perhaps a bit simplistic, but how should we break that up in terms of percentage commitment?

Clifton Bain: I will let Des Thompson answer, because Scottish Natural Heritage has commissioned work on restoration priorities throughout Scotland and we have had some interesting insights from that.

Des Thompson (Scottish Natural Heritage): Graeme Dey has asked a crucial question. The key is to keep the good-condition bogs in good condition. The analogy that Clifton Bain used is good; we should focus on those bogs and do small things to stop the peat disappearing. Think of a tear: once a peat bog is opened up, carbon and peat pour out. That is the first priority.

At the other end, some localised areas of peatland are badly damaged. By restoring those local patches, we can improve the overall wealth of the habitat.

Mike Billett (Centre for Ecology and Hydrology): The success of restoration in the United Kingdom, in particular in Scotland, will largely relate to local climatic conditions. For example, in parts of Scotland where we have the optimum conditions for peatland development—such as the flow country of Caithness and Sutherland—the chances of restoration success are much higher than they are in dryer parts of Scotland or in parts of Scotland where there is much greater difference between climatic extremes. Peatlands have developed in climatic areas that might be more topographically challenging, so it might be much tougher to stop the leakage of carbon from those systems. There are significant regional differences in where we might want to target restoration effects in Scotland.

Annabelle Ewing: The briefing that we received from the Scottish Government says, with reference to what is called

"restoration C savings of the least damaged sites",

that we might start to see some value after 10 years. I presume that the restoration work itself needs to be factored into that. What kind of time period does that generally involve for such peatlands?

Clifton Bain: Let us consider the gripped peatlands with drainage ditches that are still largely covered in vegetation. About 10,000 hectares of such an area at the RSPB Scotland reserve in Forsinard were blocked—blocks were put into the ditches to stop the water pouring out—and within a year the water level was right up, which is the crucial factor for any peatland. Within five years, the ditches were growing layers of sphagnum moss, which is the key species. Within 10 years, we expect the system to start really to rise again.

As we heard from Mike Billett, that can still happen within five years in a more tricky peatland. We have a site in Fife—Portmoak moss—where there has been huge disruption from tree planting. However, the trees have been removed from the bog and, within five years, the sphagnum carpet has reappeared and the water table has come up. That is the timescale within which you see real results, even on a difficult site.

On the type of site that has bare peat, with gullies that are 6ft deep—there are examples in the monoliths—it could take 10 years to get things back. In the north-east of England, within five years of raising the water level they are seeing sphagnum even in what is a heavily polluted and very dry area. You can click back the mechanism very quickly; you will not get a fully rich bog with all the sphagnum species for 10, 20 or 30 years, but the feeling is that it will stop emitting carbon in as short a period as five years.

Mike Billett: The scientific evidence is very clear: there is consensus among scientists that the climate mitigation effects of restoring peatlands are positive. The blocking process involves a disturbance to the system, so heavy machinery might be used; members might have seen JCBs blocking up ditches. In disturbing any ecosystem, particularly one that contains a lot of carbon, there might a short-term hit to take in terms of loss of greenhouse gases or carbon. However, in the long term—Clifton Bain talked about 10, 20 or 30 years—we start to see a gain. The likely impact of restoration is very much about investing for the future.

Mark Aitken (Scottish Environment Protection Agency): In addition to the short-term benefits that we have referred to in terms of carbon sequestration and meeting the important biodiversity targets that we have in Scotland, we now have the scientific figures that show the positive effects on water quality in the relative short term. I am thinking, in particular, about the dissolved organic carbon issue, which is an important issue for SEPA and Scottish Water. In addition, in the short term, restoration of peat can

contribute to national flood risk management by reducing "flashiness" of floods and so forth.

Professor Pete Smith (University of Aberdeen): Two processes are involved that operate over slightly different timescales. When you restore a degraded peatland, you almost immediately switch off the on-going oxidation of the carbon. When you raise the water table, it becomes anaerobic and the decomposition slows by a factor of about 1,000. If you are losing a huge amount of carbon from those peatlands, you can almost immediately switch that off. Even though it might take a while for the sphagnum to come back and start absorbing carbon from the atmosphere, there is a fairly big hit immediately because you can switch that carbon off. There are some early hits from that process but—as Clifton Bain described—the hits from the accumulation of the carbon as a result of the new sphagnum forming a little later kick in later.

Graeme Dey: My questions seek to inform my understanding of the afforestation issue. I read that 200,000 hectares of UK peat bog have been afforested. How much of that is in Scotland? Can you briefly give us an understanding of how big a job it is to deforest and restore a bog?

Clifton Bain: How much of that 200,000 hectares is in Scotland is a good question. A figure of about 40,000 hectares is bouncing around in my head, but that cannot be the right figure, because I imagine that the majority of it will be in Scotland. The main areas of deep peat planting were clearly up near the flow country and the surrounding area.

I will make two comments on the question of how difficult the matter is. With the Forestry Commission, SNH and RSPB Scotland, huge projects have been undertaken to remove the trees. The difficulty varies depending on how old the trees are. The longer a tree is left, the harder it is to remove it and the more disturbance removal causes. There are different techniques: trees can be pushed into the bog or be taken away and used as biomass. There are different opportunities.

By and large, it is practical if the large organisations are involved. Even in some of the lowland raised bogs in the central belt, people have managed to remove plantation trees. The Forestry Commission is working to remove the trees on some sites in Dumfries. It is technically possible and it is not ridiculously expensive. More than 7,000 hectares have been restored in that way in Scotland.

12:00

Des Thompson: The flow country, which is in the convener's home patch, is the supreme area for blanket bog—some would say in the world and not just in the UK. Of that 400,000 hectare resource, 20,000 hectares have been restored so far through tree removal, damming and other activities. That is one of the most successful ecological restoration projects to have been carried out in Europe and it gives the committee an idea of the scale of the work. Such work can be expensive especially where peatlands are very damaged, but we have been fortunate to have a strong partnership between SNH, the Forestry Commission, the RSPB and Plantlife and to have a lot of European Union funding for LIFE projects, for which 50 per cent of activities are funded by the EU.

The Convener: Dumfries and Galloway has been mentioned: I think Alex Fergusson wants to talk about that briefly.

Alex Fergusson: I do not know what on earth makes you think that I want to talk about Dumfries and Galloway, but you are quite right. I represent Galloway, where a huge amount of afforestation has taken place. What is the balance between the benefits of restoring peatland after afforestation and the carbon capture from a forest, if that is possible to calculate?

Clifton Bain: There is good evidence on that. The Forestry Commission's forest research agency has produced evidence on the matter. Big peatlands are long-term systems. Within two rotations, the planting of trees on bogs starts to hit a negative carbon position. Having trees on a bog increases greenhouse gas emissions. Because much of the peatland is deteriorating underneath the trees, what the trees take in is rapidly replaced by what comes out of the drained and damaged bog. The Forestry Commission accepts that. There is a gain to be made from taking trees off a bog. Even though trees suck in carbon faster, the loss of the huge store needs to be factored in.

Alex Fergusson: The gain diminishes over a couple of rotations.

Clifton Bain: Yes.

Jim Hume: I will talk about a conflict. Page 15 of the SPICe briefing refers to two issues separately. It mentions that grazing by sheep and deer can be negative and says that—as has been mentioned—afforestation can help to dry out bogs. The conflict is that taking sheep off peatland or disposing of deer would result in natural tree regeneration in peat bogs and would perhaps have a negative effect. What are your thoughts on how we can balance that out?

Clifton Bain: There are two clear points to make. We had an open evidence session at the University of Edinburgh, at which NFU Scotland and other land managers gave evidence. No direct conflict exists. Sheep grazing can continue on peatlands, but at a lower level than the intensive grazing in the past. The same applies to deer; they

are a natural part of our uplands, but their numbers in some areas have been too intensive.

A combination of effects is involved. If an area has been burned for centuries and it has grazing and has been drained, that causes problems. If the water table is raised again and the peatland system becomes more robust, trees will not grow there; trees will not grow on wet peatland. That is the first benefit, so bringing the water table back up is crucial, because trees will not naturally regenerate after that. The hope would be that grazing levels could be kept down through management of deer and sheep to a level that would not exacerbate the situation.

When a bog is drained, it is even more vulnerable to such impacts. The solution is rewetting, if that makes sense.

Des Thompson: The key word that Jim Hume used is "balance". When peatland is in good condition and the numbers of sheep and deer are sustainable—when we have wet bogs and the sheep and deer are doing nicely along with the bogs—there is no problem. On the other hand, if grazing or other activities have been heavy and we have started to lose the peat, the remaining peat can sustain far lower densities of grazing animals. That is when a problem arises. The trick is to keep peatlands in good condition; in that way, many more sheep can be sustained. Balance is critical.

Claudia Beamish: Good afternoon. I thank the witnesses for coming to discuss this important issue. I ask Mike Billett to explain an aspect that I do not understand, which is the interannual variability in the carbon fluxes. What assessments of that variability are being made that could feed into the report on proposals and policies or the diagnosis of the way forward? It could cause real problems.

Mike Billett: That is a good question. The interannual variability is right at the forefront of what scientists are working on at the moment. Because Scotland's climate changes enormously from year to year—it also changes seasonally—the ability of a bog to fix carbon will change annually. It will differ in a wet year from a warm year, and the time of year when the bog switches on and starts powerfully to draw down carbon from the atmosphere and lock it up will change each year. There is then an active growing period when the bog is much more able to fix carbon.

We are making some of the first year-on-year measurements to be made in Scotland, and we are finding that there is big annual variation, as has been found in peat bogs throughout the world. Each year, we get better at informing the science policy interface on the net benefits. The great thing about natural variability is that it also allows us to look forward to a future climate that might be different and it tells us what the likely benefits or changes in the peatland system might be.

Each year, our science gets more powerful. As I said, it is clear about the overall benefit. Peatland restoration is likely to become part of the reporting process internationally. The key step is to get it into the process, and we will then be able to modify the underlying science, because obviously science does not stop.

Claudia Beamish: I am not sure to which of you it is appropriate to direct my next question. Is work being done on the relationship between what we are discussing today and Scotland's biodiversity targets? Just as other countries are, we are falling short of our targets.

Des Thompson: Yes, such work is being done. I can answer the question because I am heavily involved in completing the draft Scottish biodiversity strategy, in which peatlands are very much in the foreground. They are one of our most important habitats, but they are also one of the most complex in terms of setting conservation and management targets. We are working closely with the scientific and management community to ensure that the science is feeding in to help us to set realistic targets for the peatlands, and so that we can track progress and report to the committee and others on progress in improving the condition of the peatlands.

Professor Smith: I have a comment in response to the question on interannual variability. It is not something that we need to be scared of, because what we need to report to the United Nations Framework Convention on Climate Change is the difference that we get through implementing a new management strategy. Even if there is interannual variability, we could look at paired plots, including those where there is restoration and those without it. They will both go up and down, but we will be able to see the incremental change from improved management and the restoration. There are scientific ways in which to factor out the interannual variability.

Margaret McDougall: I note from the SPICe briefing that there has been damage to peatlands in the development of wind farms, but that subsequently good practice has been established. What is the relationship like between SNH, SEPA and wind farm developers, given that damage to peatlands?

Mark Aitken: For wind farm developments of more than 50MW—or approximately 17 turbines—SEPA requires carbon accounting to be carried out and is the agency responsible for validating that activity. The results of that carbon accounting, in which we would, essentially, examine the carbon payback for a particular wind farm, would

be sent to the Scottish Government's consents unit for a decision.

In addition, SEPA and SNH have jointly prepared a number of publications on the peat issue and have issued good practice guidance on minimising the amount of peat removed when installing turbines, building roads, using floating roads and so on. As a result of that guidance, on which the renewables industry, SEPA and SNH collaborated, colleagues involved with the issue have noted changes in practice. Undoubtedly, though, the construction of wind farms on peatlands is an important issue.

Margaret McDougall: You seem to be saying that there is good collaboration between wind farm developers and agencies interested in protecting peatlands. Is that the case or do you think that, instead of the good practice guidance that you have issued, there needs to be more legislation on this matter?

Des Thompson: Perhaps I should answer that, as I have very recently been involved in some work with Scottish Renewables. I find it ironic that, today of all days, with all the public interest in wind farms, SNH actually has a very strong, positive, collaborative working relationship with not only SEPA, but Scottish Renewables on peatlands and a whole range of other issues, including post-construction monitoring. This has been a great success story of how to develop good practice, how to minimise impacts on people both during construction and subsequently and, indeed, how to provide guidance on where we would prefer wind farms not to be developed. It is certainly worth putting it on record that we have a very good working relationship with Scottish Renewables and a number of individual developers.

Margaret McDougall: So you see no need for further legislation.

Des Thompson: No.

The Convener: As was said in the previous session, I just wish that the press were here to listen to and understand these rational arguments.

Clifton Bain: I should perhaps add a small rider to this discussion. As part of their close involvement and participation in our inquiry, the wind farm industry and Scottish Renewables gave us some excellent examples of the large-scale peatland restoration they had carried out in order to reduce the carbon footprint of developments. They were repairing already damaged peatlands in the locality and investing millions of pounds in repairing large areas of peatland. It just shows how the requirement to reduce the carbon footprint has led to positive outcomes for peatland biodiversity.

Professor Smith: As someone involved in the development of the wind farm carbon calculator, I should reiterate that Scottish Renewables and a bunch of other companies were engaged as key stakeholders in that work. As that tool shows, if good practice is not followed in constructing a wind farm, the payback time is ludicrous and does not make a huge amount of sense. The technology might aim to reduce carbon, but a lot of it is piddled out when the turbines are put in. On the other hand, the tool also shows that if all the examples of best practice are followed and the best restoration possible is put in, the situation can be significantly improved.

At the outset, we thought that the tool would show just that this activity would be a bad thing but, on the upside, it also shows the restoration measures that need to put into practice either at the wind farm or in the locality to offset certain potentially negative impacts. As a result, we have had good engagement from all sides, particularly from Scottish Renewables, as the tool gives it a way forward and a whole bunch of guidelines from which the good practice guidance was developed.

The Convener: I have a queue of members waiting to ask questions.

Annabelle Ewing: I will return to the issue that arose at the very outset of our discussion about the area of Scotland that is involved, the different measurements that are used and the different ways of defining peatland. How does that square with the efforts to secure international accounting guidelines for carbon abatement? If you do not agree on how to measure peatland, how can you work out how to measure carbon abatement?

12:15

Clifton Bain: That is a good, clear question that has exercised our minds and the minds of international scientists who are involved in the Kyoto process. They have come up with a net-net accounting process, which we will get Pete Smith to explain in more detail, as he is the master of the maths behind those things. With a net-net accounting approach, all that has to be done, in effect, is to measure what we have changed since 1990. We accept that carbon was coming out of the bogs in 1990 from previous drainage, and we measure the positive changes that we have made since then. That is how the Kyoto process works. If any damage has been done since 1990, we measure that as well, and that is far more measurable. We simply monitor the areas that we have restored or measure the areas that we have restored and the areas that we have done further damage to. That saves a lot of time and effort.

Pete Smith knows a lot more about the details of that than I do.

Professor Smith: I do not really want to try to explain the accounting, so I will skip over it. The important thing is that the IPCC is developing guidelines for wetlands that include peatland restoration. I think that the letter from the minister that was tabled with the documents associated with this meeting refers to the meeting that Scotland hosted earlier this year. The guidelines are out for expert consultation. Therefore, there is a mechanism that means that, if we can identify the areas and the practices that have occurred, we can account for the carbon either at the crude level, which is the tier 1 level, at which we just have an emission factor, or at the tier 2 or tier 3 level, at which we go into more sophisticated measures.

Annabelle Ewing's question was not only about that; it was also about the activity data. If we do not know where the peatlands are and what state they are in, it will be difficult to apply those factors spatially. Work still needs to be done. Work that SNH has funded and which is being conducted by the James Hutton Institute is starting to fill in the gaps. We know where the data is, but there has not been funding previously to look at it. We are starting to put things together, and I am confident that we will have sufficient activity data to start to run them in a national accounting framework.

Annabelle Ewing: I agree that the SPICe briefing is excellent. It states:

"Scotland has ... 4% of Europe's total peat carbon store."

From the perspective of a commonality of interests with other countries, from which Scotland could garner support in terms of international positions, who are the other main players in the area, particularly on the European stage?

Clifton Bain: In Europe, there is considerable expertise in Germany and Holland, which have damaged a lot of their lowland peatlands. We are the European stronghold for the blanket peatlands, and the flow country is probably the best example of an oceanic blanket bog in the world. We also have very important raised bogs, including some of the best raised bogs in Europe. We are therefore the centre of attention for those two habitats.

On expertise and advice, there is a strong network of academics across Germany and Europe who are largely involved with the IPCC work. We already have that coalition.

Wetlands International operates beyond Europe. There are 175 peatland nations in the world, and there are blanket bogs up in the mountains of some African countries. That is an amazing habitat.

Asia is the big resource of deep peat. There are huge problems with losses and damage to peatlands there. It is interesting that the techniques that we have learned in Scotland to restore peatlands are being applied in places such as China. I have seen one of our textbooks being used in the field in China to repair gullies that have appeared in its peatlands. There is a big opportunity for the exchange of scientific and accounting information from us to other countries.

Wetlands International, the IUCN and the IPCC on the carbon side are gathering intelligence and expertise. There is a big recognition across the Ramsar convention that it is a matter of multiple objectives. It is not just carbon that the IPCC is interested in; it is the biodiversity side and water as well.

Those are the main organisations that are trying to share information across the world.

Annabelle Ewing: What you said about expertise was interesting. That is yet another area of potential for Scotland in terms of academic expertise that can be exported or that we can seek to exploit. I do not know what availability there is for courses or otherwise in that regard in our universities, but if Asia, for example, has a particular problem, then countries there might be interested in having their students come to Scotland to obtain the necessary expertise that they could then take back to their own countries. I do not know whether I am reinventing the wheel in this regard, but it could be a growth area for the Scottish tertiary sector.

Des Thompson: That is not reinventing the wheel. You are inventing the wheel with that very good suggestion. Perhaps we have underplayed in the report the role that we could play in working with other countries to help address the restoration issues that Clifton Bain has described. We could deploy not only the science, but our management and know-how. We should think about that more in terms of forging alliances. We should think about the Nordic countries in that regard, because we have some good working ties there. We could mutually gain a lot from working with one another. I know that Mike Billett does a lot of collaborative research.

Mike Billett: As a research scientist, I work with peatland scientists in Canada, Finland and Sweden and I supervise PhD students outside the United Kingdom. The peatland community, particularly those working in the northern hemisphere, is very together in terms of its research. We also bring in scientists from other countries to work in our universities and research sites, which have an increasingly high international profile. It is all very positive and the community is cohesive. I agree that there are some scientific communities that are perhaps not as cohesive but, collectively, the peatland group is very strong in Scotland and the United Kingdom.

Clifton Bain: When we started this programme three years ago, part of the reason the money was given for it was a frustration among land managers and policy people about conflicting and confusing science coming at them. I hope that what we have achieved through the inquiry is a way of setting the policy agenda and the land managers' agenda so that the scientists have something to focus on and we get a much more consensual knowledge-exchange approach as opposed to just seeing a lot of information. We have learned a lesson about how to go forward. If we have a clear direction and objectives, the scientific community can help with delivery. Without that clarity, there is only a minefield of odd information. That is an important lesson if we want action.

Graeme Dey: Scotland's peat is currently reckoned to hold carbon that is equivalent to 100 times our annual emissions. If we implemented the kind of balanced restoration programme that we have been talking about, to what extent could the peatlands' storage capacity be enhanced over five, 10, 15 or 20 years and at what sort of cost?

Clifton Bain: We must do two things. First, we must keep our peatlands sucking carbon out of the atmosphere—that is the sequestration job. We have a legacy of damaged peatlands as a result of the drainage and damage that was done from the 1930s through to the 1970s. Those damaged peatlands are emitting vast amounts of carbon into the atmosphere. Repairing and restoring them would potentially bring us—we have used mid-estimate figures, but it varies—around 2.5 tonnes of carbon dioxide per hectare. That is equivalent to one household's annual emissions per hectare of peatland that we restore. Once we have restored it, we then start to get an additional benefit from what it is sequestering.

If we secured 100,000 hectares of peatland restoration, that would be 100,000 households' annual emissions saved from going into the atmosphere. The point is that we must do that restoration anyway, for our biodiversity objectives, and there are water benefits as well. The cost of the restoration will vary, depending on the degree of damage to the peatland. The majority of our peatlands are in the slightly damaged category, so restoration would cost £100 to £300 per hectare; for really damaged peatland, the cost would be £1,000 to £2,000 per hectare.

I will make a guesstimate across the peatland resource. If we delivered our 600,000 hectare target, with the majority of it at the lower end of restoration costs, we are looking at a cost of £120 million to deliver the target over the next 10 years, which is £12 million a year. We are not asking for brand new money to deliver this, because peatland restoration hits so many different objectives—rural affairs, the common agricultural policy budget and agri-environment spend. There is an opportunity to take £5 million per year for the restoration of peatlands.

We should look at what local authorities contribute. On the lowland bogs, a lot of communities want local authority support to deliver their climate change objectives, which would be another couple of million pounds. Scottish Water has obligations and a sustainable land management fund, which is putting £2 million to £3 million into such activity. We have heard that the wind farm companies are putting in £1 million or £2 million. There are other private business interests and the carbon market side of things could bring in peatlands, and although we have that for woodlands, I will be frank and say that it is several years off for peatlands. However, that too could bring in a few million pounds.

The point is that that £12 million rapidly reduces, and if the climate change budget within rural affairs gives a fair chunk, you have the £12 million. What is wrong is that there is no clear signal about how that money should be spent. We do not want peatlands to detract from house insulation or other environmental priorities, but this task needs to be done and we need that money to be brought in.

The other opportunity—I am sure that Des Thompson has more experience of this—is to bring in European money against that spend. We know that the next round of CAP will give strong priority to carbon, climate change benefits, water and biodiversity, and peatlands are a clear winner there. There is also funding through the EU's financial instrument for the environment—LIFE+. There are opportunities to bring that money back. As I say, we could look at private business initiatives and ways of drawing in the private sector in future. The conclusion is that it is not so scary.

The inquiry analysed whether peatland restoration is cost-effective. DEFRA gave the social cost of carbon as around £250 for every tonne of carbon dioxide in the atmosphere. It costs about £13 per tonne of carbon dioxide to save peatlands. That is cost-effective.

A further point is that there are job opportunities. We hear evidence from the flow country that, when restoration started, the number of jobs on the estate was bumped up from four or five to 13. As we said earlier, there is the opportunity to deliver multiple objectives.

The Convener: I am conscious of the time.

Richard Lyle: I have just a short question. I know that peat is being extracted from 23 active sites, six of which give peat for energy sources and whisky, and 20,000 tonnes of peat are cut for fuel. In 1990, the peatland campaign consortium wanted to ban the use of peat in compost but we

can still find it in compost. Do you have any concerns about that? What action can be taken to reduce the peat content in compost?

Clifton Bain: Most horticultural peat comes from lowland raised bogs because it is neither practical nor suitable to take peat from blanket bogs. The horticultural peat industry has targeted a very rare type of peatland.

The committee discussed waste earlier, and Scotland has an opportunity to base its horticultural industry on peat alternatives. Several new companies are forming in Scotland and making alternatives using waste products such as garden compost and food waste. They are making workable and approved products that will mean that we will not have to use peat in our gardens. Those products are available for sale now. That seems to be the future.

There are, however, many existing outstanding planning consents on lowland raised bogs. In England, a lot of companies are being paid by the Government to leave the peatlands, and it would be a shame if they came up to Scotland as the softer option. We will have to look at the question. The inquiry concluded that there are clearly more sustainable ways forward for the horticultural industry than relying on peat.

12:30

Des Thompson: Just to be clear, we still have concerns about some large firms and parts of the horticultural industry that are using peat in soil. That is simply not sustainable.

Mike Billett: On a point of clarification, peat extraction is, like any other element of the land-use chain, already part of the IPCC accounting process.

Claudia Beamish: In my previous life as a primary school teacher, Braehead moss was out the back of my school. I was just wondering how, as well as raising water, we might raise awareness of this issue and how, aside from the educational aspects, we can ensure that communities form a connection with bogs such as Langlands moss that are being protected and enhanced.

Clifton Bain: Last week, the Scottish Wildlife Trust launched its lowland raised bog assessment. In surveying the majority of the raised bog resource, it found not only that 90 per cent of it was damaged but that 90 per cent of the landowners in those areas would be happy for the bogs to be restored. On top of that, we invited in a group of community interests from Fife and the central belt—including from Langlands—that have been actively involved in restoring the peatland, putting up information boards and putting out boardwalks. Although they have been raising money to deliver all that and are getting help from local authorities, they wanted technical support and support from agencies and non-governmental organisations to draw in money and, when they explained the situation, they found that people were interested.

We knew that trying to sell bogs would be a challenge; however, although it will never be the most interesting issue, we find that when we explain the benefits to people they become interested. An awareness-raising element is crucial, but there is a receptive audience out there. Resources are being developed for schoolchildren; for example, various films are available and in certain initiatives children are being taken on to the bogs of the UK's national parks. As part of the next phase of its peatland programme, the IUCN wants to gear up that awareness raising; indeed, the Hutton Institute has created some amazing characters to convey the dynamics of peat soils. The issue is crucial and there is a willingness to take it forward, but I have been overwhelmed by the community interest in some of the local sites that they are trying to protect.

Des Thompson: Interestingly, we think that, in refreshing the Scottish biodiversity strategy, we probably need to consider a step change in the way local communities are involved in peatland restoration. Clifton Bain is absolutely right; when you go to the peatlands and chat to the people involved, you find that they are enthusiastic individuals. Of course, such activity is very good for people's health as well as helping them to connect with nature, and I think that we should push this particular issue very hard.

Clifton Bain: It also gives local authorities an opportunity to engage. After all, they are a starting point for these communities.

The Convener: I will try to round things up with this question. I note from the IUCN commission's report that there is a need to create a peatland carbon code as a focus for people to link their community, businesses and agencies with the potential in that respect. How would such a code be drawn up and who would do it?

Clifton Bain: DEFRA is looking at the general issue of payment for ecosystem services, and the IUCN has agreed that its peatland programme will pursue the specific issue of peatlands and a peatland carbon code. That code will have many audiences; for example, those with an interest in the carbon market will need it to give comfort to that market. The code will also need science in order to know what numbers to apply and certain policy processes to ensure that peatland is protected for the long term, that someone else does not come along and drain it again and that

various other accounting matters are taken into account. That will all take some time.

An early job for the peatland carbon code is to give the comfort that restoring peatlands is good for climate change, which will mean that businesses that may not necessarily be interested in markets and trading their carbon but may just want to do some good work for climate change will know that it is an important activity. A code will help in that way, initially. That must be augmented by Government saying that restoring peatlands is an important job, because we know that, if business is to invest money in peatlands, it needs some reward, and knowing that Government values such work will help with that.

The code will have a very gentle initial outcome. We hope to have the start of a code by the start of 2013. It will grow and mature to be something that a carbon market could benefit from in a few years' time.

The Convener: Before I move on to my second point, Graeme Dey has a small supplementary.

Graeme Dey: It is just a brief question, rather than a supplementary.

How complete a register of Scotland's peatlands do we have? Is it broken down by local authority area? What form does it take?

Des Thompson: We have that. There is, for example, a peatland inventory on the SNH website, which is broken down into fens, raised bogs and blanket bogs. A lot of that information is also available on the Scotland's environment website, and the local authorities have it.

Graeme Dey: Are you confident that it covers 100 per cent of Scotland's peatlands?

Des Thompson: It does not cover 100 per cent of the peatlands, but it is as complete as it can be.

The Convener: We have the benefit of having with us Pete Smith, who has been involved in work on peatlands on a global level, which is excellent. The development of the guidelines that the IPCC is drawing up will be critical to the international efforts. Would you like to bring us up to date with where we have got to since the gathering in January and what the next steps are?

Professor Smith: Okay. I am not working on those guidelines, although I will act as an expert reviewer for them.

When it was agreed in Durban that wetlands management would be a fifth electable activity under article 3.4 of the Kyoto protocol—to use the legalese—to go along with the four existing electable activities of cropland management, grazing land management, revegetation and forest management, it was recognised that there needed to be good practice guidance for accounting for the changes in carbon stocks and for the greenhouse gas fluxes, so the process of developing the guidelines was initiated.

The guidelines will look very similar to the guidelines for the other land uses. They will be tiered. There will be simple emission factors that can be applied in countries—particularly developing countries—that do not have the capacity to go out and measure, and which do not have good data to use. There will be tier 2 methods, whereby it will be possible to substitute in your regional estimates of your emission factors, and there will be tier 3 methods, which are used in many developed and industrialised countries, where we have the science and the activity data to support them.

The first draft of those guidelines is complete and they are currently out for expert review. The expert reviewers will feed back and the guidelines will, I understand, be revised later this year. At that point, we should be looking at getting some accepted guidance that can be put forward to be adopted by the Governments next year.

The Convener: Thank you very much for that. You have whetted our appetites on a subject that few of our members knew a lot about. Our inquiry has a long way to go. We will take more evidence, and I guess that we will see some of you gentlemen again. Thank you very much for taking part in this introductory session. I hope that you feel that the questions were such that we got to some of the roots of the issues.

I remind members that we will have a private meeting afterwards. There will be no formal meeting of the committee next week, but we expect to have two private, informal sessions with SNH and possibly with SEPA. I look forward to seeing members then.

Meeting closed at 12:39.

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