

Environment, Climate Change and Land Reform Committee

Tuesday 20 June 2017



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ENVIRONMENT, CLIMATE CHANGE AND LAND REFORM COMMITTEE 19th Meeting 2017, Session 5

CONVENER

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DEPUTY CONVENER

*Maurice Golden (West Scotland) (Con)

COMMITTEE MEMBERS

- *Claudia Beamish (South Scotland) (Lab)
- *Alexander Burnett (Aberdeenshire West) (Con)
- *Finlay Carson (Galloway and West Dumfries) (Con)
- *Kate Forbes (Skye, Lochaber and Badenoch) (SNP)
- *Emma Harper (South Scotland) (SNP)
- *Richard Lyle (Uddingston and Bellshill) (SNP)
- *Angus MacDonald (Falkirk East) (SNP)
- *Mark Ruskell (Mid Scotland and Fife) (Green)
- *David Stewart (Highlands and Islands) (Lab)

THE FOLLOWING ALSO PARTICIPATED:

Robin Baird (Falkirk Council)
Tony Boyle (Glasgow City Council)
Jim Brown (Binn Group)
Martin Grey (Viridor)
Iain Gulland (Zero Waste Scotland)
Linda Ovens (Entec Solutions)
Barry Turner (British Plastics Federation)
Rebecca Walker (Scottish Environment Protection Agency)

CLERK TO THE COMMITTEE

Lynn Tullis

LOCATION

The Robert Burns Room (CR1)

^{*}attended

Scottish Parliament

Environment, Climate Change and Land Reform Committee

Tuesday 20 June 2017

[The Convener opened the meeting at 09:46]

Decision on Taking Business in Private

The Convener (Graeme Dey): Good morning and welcome to the 19th meeting in 2017 of the Environment, Climate Change and Land Reform Committee. I remind everyone present to switch off mobile phones, as they may affect the broadcasting system.

The first item on the agenda is consideration of whether to take items 4 and 5 in private. Do members agree to take those items in private?

Members indicated agreement.

Waste

09:46

The Convener: Our second item of business is evidence from two panels of stakeholders to explore waste generation and disposal in Scotland. I welcome Robin Baird, waste manager with Falkirk Council; Tony Boyle, divisional manager for waste management and recycling with Glasgow City Council's land and environmental services; lain Gulland, chief executive of Zero Waste Scotland; and Rebecca Walker, manager for waste and landfill tax with the Scottish Environment Protection Agency.

Members have a number of questions and we have a lot of ground to cover. I remind members and witnesses that short, sharp questions and answers would be extremely helpful. The witnesses do not have to answer every question if they feel that they do not have a locus in the area.

Alexander Burnett (Aberdeenshire West) (Con): Good morning and welcome. I will start off with a general theme. What have the general trends been over the past 10 years with regard to waste generation? What are your views on the data that is collected about that and how it could be improved? What are the priorities or hierarchy for improving waste management?

lain Gulland (Zero Waste Scotland): I thank the committee for the opportunity to come today.

There was quite a lot in that question. We have seen a reduction of around 47 per cent in total waste arisings over the past 10 years. One challenge that we have talked about in the past is the decoupling of waste arisings from economic activities. I am not an economist, but certainly the economy of Scotland has grown over that period as well, so it is good to see that the trend is in the right direction and that we have decoupled waste arisings from economic activity. A reduction of 47 per cent is considerable.

In the past few years, the waste generation figure has steadied slightly for a number of reasons. One thing that obviously impacts a lot on the number is construction and demolition waste, which makes up 45 per cent of the total arisings in Scotland. Although a lot of that is recycled, and quite a lot of prevention activities are being carried out, the scale of developments can skew the numbers slightly. There is not a trend as such, because some years the figure goes up and some years it goes down. There has been a very steady state over the past four or five years.

Household recycling has certainly increased considerably over the 10 years. As everybody knows, the figure is now up to about 44 per cent,

although those numbers are based on 2015 data. I guess that one of the challenges that we face is that the data always runs slightly behind in terms of years. However, the direction of travel is positive and household recycling is increasing.

A lot more recycling is being carried out in the commercial and industrial sector since the waste regulations came into force in 2014 and were further strengthened in 2016, particularly around food waste. We are seeing a lot more commercial and industrial recycling as well as recycling in construction and demolition.

Those are all good news stories. Although the reduction in waste arisings has slowed down over the past couple of years, we have seen a significant increase in carbon reductions. As we have started to target key carbon-intensive materials, particularly food waste and plastics, the carbon impact of our waste has reduced by about 25 per cent over the past four or five years. That shows that we can look at the tonnages and take a weight-based approach but, with a lot more work being done by Zero Waste Scotland and other partners on the whole idea of measuring through the carbon metric, looking at the carbon intensity of those materials and providing strategies to target them in line with our climate change ambitions here in Scotland, we are seeing another significant impact on different material streams in Scotland.

One of the other things to mention is the composition of waste. The top five materials in terms of carbon intensity in Scotland are not the top five materials when taking a weight-based perspective. We need to understand that, if we are going to really target carbon, we are not looking at the big heavy items in the overall waste stream.

More of our work now is trying to ensure that we are focused on the weight-based impacts in our waste management, but we also need to target initiatives and interventions around carbonintensive materials so that we can realise our wider climate change ambitions.

I could keep talking.

The Convener: Does anybody else want to come in on that point?

Tony Boyle (Glasgow City Council): Glasgow is a microcosm of Scotland. We have similarly seen a decrease in waste. The overall tonnage in 2007-08 was 363,000 tonnes, and in 2016-17 it was down to 265,000 tonnes, which is quite a significant decrease.

Robin Baird (Falkirk Council): The specific question was about the past 10 years. Sometimes I think we forget where we have come from. If we had had this conversation 10 years ago, it would have been a different conversation about being

the dirty man of Europe. We are now one of the most forward-thinking nations trying to deliver sustainable waste management practices, whether that is through deposit returns or enhanced kerbside collections.

lain Gulland talked about waste composition in his answer. It has certainly changed significantly during the past decade. If I asked any members of the panel or the committee how many people bought a paper this morning compared to how many did so 10 years ago, that would show a significant change, and it has changed the composition of waste quite dramatically. A lot of people get deliveries from Amazon, so they put a lot more cardboard packaging into the waste stream but there is a lot less newsprint and stuff like that. That is another significant change.

Rebecca Walker (Scottish Environment Protection Agency): I will come in on a couple of points and then talk about the data. At the moment, 11.6 million tonnes of waste is being generated in Scotland. The most reliable figures are from 2011 to 2015 when the Scottish Environment Protection Agency changed its methodology on commercial and industrial waste, which helped with reliability by looking at regulatory returns rather than surveying the businesses.

Since 2011 to 2015, household waste has remained relatively stable at 2.5 million tonnes. Commercial and industrial waste is also relatively stable at 3.6 million tonnes, and the variability of between 5.5 million and 3.8 million tonnes in construction and demolition waste has mainly been because of the economy and the number of infrastructure projects. That is quite a significant variation but, as lain Gulland said, the story in the construction and demolition sector is a good-news story, because there is a recycling rate of 72 per cent, which exceeds the directive target for 2020 of 70 per cent.

As far as the waste data is concerned, we have more reliable trends dating back a decade. Back in 2005, 7.05 million tonnes of waste was sent to landfill; the figure is now 4.1 million tonnes. Again, that is a really good-news story. There has also been an overall decrease in the amount of household waste that is generated. That could be a result of the composition of waste—there is a lot less paper, so the tonnage is lower.

We are continuing to strive to have more accurate data. In recent years, we have issued guidance to the operators on that, and we are looking at different methods of verification. I think that the move to online data reporting will help with reliability, and we are actively looking at ways to implement that to make sure it is as reliable as possible.

The waste hierarchy is all about having the right mix of the right tools and levers in the right place. There is no single solution. We must look at what we are doing across the hierarchy. We need to use the landfill tax to move away from landfill. There are also all our interventions on recycling, such as the producer responsibility regulations and the Waste (Scotland) Regulations 2012, which require producers to separate their waste.

As far as the reuse sector and manufacturing are concerned, we have a very comprehensive Government strategy. In the extent to which it covers the hierarchy, I would say that it is the most comprehensive strategy in the UK because, as well as covering reuse and remanufacturing, it gives landfill its place. We are lucky to have such a comprehensive strategy, along with the tools to make those interventions.

However, there is more that we can do. We need to understand what is coming out of our commercial and industrial sectors so that we know what opportunities exist to keep those materials in the economy and to get the best value from them.

The Convener: Thanks.

Let us move the discussion on. From your perspective, how achievable is the 2025 target to recycle 70 per cent of all Scotland's waste? In practice, what will we need to do if we are to achieve that?

Robin Baird: As we sit here today, it is unachievable. That sounds a striking statement, but we need to do a lot more to create the instruments that we need. We have come a long way in the past few years, but it is clear from the waste data that Scotland's performance as a nation is starting to plateau. That must be a concern as we approach the landfill ban in 2021.

We now have a good opportunity to take a step back, to learn the lessons of the past 10 years and to look at what has worked, what has not worked and what we need to do to move forward. Many of Europe's most high-performing countries on recycling have direct variable charging in place for their residual waste. Unfortunately, unless we look seriously at how we manage our residual waste—I am talking about the householder level, in particular—we will be pushing uphill.

Falkirk Council has moved to four-weekly residual waste collection in an effort to take out as much of the recycling as possible. Even though we have other collections in place that allow people to fully separate their waste, 25 to 30 per cent of our residual waste could still have been recycled using the services that we provide, so there is a long way to go.

The committee—and others like it—having this conversation is the first step. I want to present the

committee with a challenge. How serious are we in wanting to achieve the targets? That will determine how serious we are about making the right decisions to change people's behaviour. Some of the decisions that will have to be made will not be popular, especially initially, but we must take the wider view. Rather than asking whether something is the popular thing to do, we must ask whether it is the right thing to do. That is a challenge that the committee will have to address.

The Convener: Let me throw a question back at you. The performance of councils in this area varies across Scotland. To what extent is that down to the public and to what extent is it down to how the councils approach the issue?

Robin Baird: Every council has recycling provision at the doorstep. Many people would argue that the householder has the ability to make the right choice at the disposal point.

It is a bit of both. I do not think that any council would say that it has perfected its communication with residents. Have we made it as easy as possible? Again, that is open to debate. At the end of the day, when it comes to it, we cannot make householders do something that they do not want to do.

10:00

Rebecca Walker and Ian Gulland mentioned the Waste (Scotland) Regulations 2012. I have always said in presentations in committee that one of the most frustrating things is that we so badly missed a trick with those regulations. The regulations say in brackets that householders are exempted. Does it strike the committee that we are really being serious about recycling when we exclude something as crucial as making householders recycle? I will throw that back and ask why the bracketed exclusion was put in.

Tony Boyle: I echo Robin Baird's point. We seem to have given the biggest waste creators—the householders—a get out of jail free card. The Waste (Scotland) Regulations 2012 amended the Environmental Protection Act 1990 in various ways, including by adding the following statement:

"It shall, from 1st January 2014, be the duty of any person who produces controlled waste (other than an occupier of domestic property as respects household waste produced on the property) to take all reasonable steps to ensure the separate collection of dry recyclable waste."

Glasgow City Council, like many councils, is trying its level best to encourage and engender recycling, but it can only take it so far. You can lead a horse to a well but you cannot make it drink. We are doing lot to try to get residents to recycle, but they are not compelled to do so. It is very difficult. Communication is one thing, and we have done a lot of work with Zero Waste Scotland

and the Scottish Environment Protection Agency over the past couple of years, trying to encourage recycling, but we fall short in terms of getting the residents actively to take it up.

Getting on my soapbox for a second, what compounds that are some of the unique problems that Glasgow faces with its housing stock. We have 160,000 flats. The people who live in those flats, as opposed to the 125,000 who have a kerbside service, have a completely different level of recycling opportunities. People who stay in a flat, as I do, have to walk round to a public recycling point to dispose of glass, whereas those who stay in a kerbside property have a bespoke glass bin. There is a lot of stuff that we could be doing to encourage the residents to recycle, but tagged on to that is the infrastructure—ensuring that there is enough infrastructure and, indeed, the budget for councils to utilise on that.

The Convener: While I very much accept the point that you have just made, surely the variable approach of councils does not help either. For example, in Angus people can recycle glass at the kerbside but in Aberdeenshire they have to take it round the corner to another facility. To what extent does that contribute to the problem?

Tony Boyle: Quite significantly, I would say, but it is a matter of horses for courses. With no disrespect to Falkirk, it is tiny in comparison with Glasgow. Glasgow council is dealing with 600,000 residents and unique issues, and it is under major financial pressure in terms of budgets. At a time when we are looking at a reduced frequency of household uplifts, it is part of our economic solution as much as of our environmental solution. Glasgow has taken the leap with its residual waste treatment solution. We looked at the whole issue of landfill bans—the curtailing of those—10 years ago and we worked on a progressive solution, and yet it will cost us more to provide that solution than it would if we were using landfill.

The Convener: I want to open this out to the rest of the panel, but let us stick with the local authorities at the moment. If we move to a deposit return scheme, what impact will that have on your kerbside recycling activities? Is there a danger that councils will row back from kerbside recycling if they cannot access glass and plastic, for example?

Robin Baird: First, I return to the point about consistency. The commitment of councils is reflected in the fact that 25 of them have signed the household recycling charter—I believe that that is correct; you could confirm that. I use the example of food waste. We collect food waste weekly, as do pretty much the majority of other councils. All food waste goes in the grey caddy every week—it could not be simpler. However, we get only 55 to 60 per cent participation in that

service. We provide a service consistent with that of other local authorities, yet we can barely get 50 per cent efficiency at householder level. Consistency is a big part of the issue. We have signed the recycling charter, but we need to be careful not to think that that is the sole solution, because it will not be.

On deposit return schemes, which I think came up at the evidence-gathering session, I am a strong proponent of the idea that we cannot spend the same pound twice. If there is a deposit return scheme in addition to an established kerbside collection, are we assuming that the deposit return scheme will not work? If it is not going to work, there has to be a kerbside collection service; if it is going to work, we do not need a kerbside collection service, because that waste will not be in the waste stream that Tony Boyle and I deal with. Someone who is thinking about setting up a deposit scheme must first decide whether it will work. If it is going to work, local authorities should not put resources into collecting material that should not be there for collection.

The Convener: Would local authorities row back completely from kerbside collection of other items? That is my concern.

Tony Boyle: I do not see that being an issue. There will always be a requirement for a collection of dry mixed recyclate that is not plastic bottles, for example.

An interesting point about the waste charter is the attempt to have a one-size-fits-all strategy for all local authorities. Quite simply, such an approach creates winners and losers, and I suggest that Glasgow is a significant loser, in that it has a large amount of flatted housing stock but must try to adjust its infrastructure to suit the waste charter.

In future, we should maybe consider European models. Probably most people here have been on holiday in Europe and seen the larger containers, as opposed to our 240-litre individual wheelie bins. Sometimes there is underground containment. If our aim is a uniform system, we have to look seriously at such an approach, which would bring economies of scale and other advantages.

However, that does not get us away from the need to engender responsibility among individuals in households to do the right thing. Robin Baird talked about food waste. Even when a food waste collection scheme is provided, 30 to 40 per cent of food waste is not recycled; people disregard the approach and put their food waste into the general waste bin. That does not help.

The Convener: Do you want to respond to the question, Mr Gulland?

lain Gulland: On deposit return schemes?

The Convener: I meant the original question about how achievable the 2025 target is—sorry, we have moved on a bit.

lain Gulland: The numbers are quite interesting. The 70 per cent target by 2025 is for all waste. At the moment the household recycling rate is 44 per cent, but the total recycling rate in Scotland is 57 to 59 per cent. As Rebecca Walker said, the high recycling rate in the construction industry and commercial sector pulls up the average.

That said, let me support my colleagues Tony Boyle and Robin Baird. Although household waste accounts for only 25 per cent of the weight, it accounts for 53 per cent of the carbon, so we need to start thinking seriously about how to increase household recycling rates significantly that is where the carbon intensity is. That is hard to do, partly because of the waste prevention activity that goes on. We talked about what is happening with paper, which to some extent is to do with a trend rather than a specific intervention by Government, Even in the commercial sector, a lot of waste prevention activity takes out some of the easier-to-recycle materials, such as paper, which makes it harder to achieve the recycling target.

I am probably more inclined to look at the target. What are we trying to achieve? Are we talking about 70 per cent of the weight, or are we trying to achieve some other outcome for Scotland? I guess that since the target was put in place we have shifted our thinking about carbon. We have recognised opportunities in relation to our carbon ambitions, and we now have a circular economy strategy.

It is not about recycling for the sake of recycling; it is about putting in place systems, processes and infrastructure in Scotland that can reap economic and social benefits as well as environmental benefits. Instead of exporting the bulk of our material, we can make things last longer. Scotland exports to other economies more than 70 per cent of materials that are collected for recycling.

On the implications for jobs, it is accepted that for every job in recycling there are another eight jobs further up the processing stream in reprocessing, remanufacturing, reselling and resupplying the materials back into the economy. That is the real prize that we are trying to realise with our ambitions for a circular economy in Scotland.

Now is the time to think about what outcomes we are trying to achieve for Scotland in chasing targets. There is much more focus on the carbon implications of different waste streams and different materials, and what they can do for our

economy by creating jobs and prosperity. That is something else to consider.

The Convener: I am interested in the impact of activities that are coming down the track. Have you done any work on oil rig decommissioning, for example? There is a lot of talk about the jobs that that will create, but I was briefed on a case in England where there were only 12 jobs once the rig came ashore. Much of what can be recycled and reused is stripped out in the North Sea, then the rig is brought ashore. What concerns do you have about the impact of any extensive decommissioning work that is carried out in Scotland, such as waste going to landfill? I understand that there is only one suitable site in Scotland for that type of material.

lain Gulland: SEPA will probably know a bit more about the facilities that are available. We have done some analysis of the opportunities circular economy decommissioning in the North Sea. The bulk of the infrastructure that comes ashore will be recycled. A lot of it is metal and there is already infrastructure in play to cut up that stuff, for want of a better term, at the harbourside. Most such material leaves Scotland to be processed in other parts of the world. I guess that that is good for the environment, but there are opportunities to reprocess some of those materials, even the steel, here in Scotland. There are also opportunities for the reuse, remanufacture and repurposing of some of the high-value equipment that comes onshore, instead of just fragmenting it, cutting it all up and shipping it off for recycling. The oil industry is keen to look at that because of the value of the materials, products and parts of the oil rig and subsea infrastructure, and the opportunity for a 15fold increase in jobs.

The Convener: Would the bulk of the material that comes ashore be recycled?

lain Gulland: Yes. I cannot remember the percentage figure, but it would be in the high 90s. A lot of the steel infrastructure would be recycled. You can imagine some of the stuff that is subsea. It is recycled, not reused or repurposed. A lot of that does not happen in Scotland. Our job is really to dismantle it and cut it up. The high-value jobs would be in reprocessing the stuff and remanufacturing it. We have been talking to a lot of companies in the north-east and around Scotland as a whole. The supply chain that puts the stuff out to the North Sea is Scotland wide; it is not all based in the north-east. There are opportunities all down the east coast, such as in Montrose and Dundee, and further afield, to repurpose some of that equipment and put it back into the North Sea or into other oil installations around the world.

Rebecca Walker: We recognise the value of the materials that will come onshore from the oil and gas sector. We have identified oil and gas decommissioning as one of the first sectors that we will look at through our sector approach. We are working with the Scottish Government to make sure that we have the facilities and capability to bring the materials onshore and dismantle them in Scotland, and get the added value for the Scottish economy, all within a strong environmental protection framework.

As lain Gulland said, a lot of the material will still go abroad. The majority of our paper, plastic and metals, both ferrous and non-ferrous, get exported, because we do not have the reprocessing facilities in Scotland. On oil and gas decommissioning, we are in a position to get the facilities in Scotland that can do the dismantling and add value at that part of the supply chain.

We tend to keep all the heavier materials, such as aggregates, soils, glass, and inert or organic materials, and recycle or reprocess them domestically. Scotland has a good circular economy supply chain working on that.

As lain Gulland said, tonnages and recycling should not be looked at in isolation. We have to look at all the factors within an environmental protection framework. In deciding where to make interventions and what is best for Scotland's environment, society and economy, we need to look at the economic benefits and acknowledge that we work within global markets, with energy costs and labour costs that have to be taken on board.

At the moment, our recycling rate across the economy is 57 per cent, and we are on track to meet the 70 per cent target by 2025. As we strive for that higher quantity, we must address quality, because that is how we will get secure, sustainable markets, and as much economic benefit from the materials as benefit from protecting the environment.

10:15

Maurice Golden (West Scotland) (Con): First of all, I declare an interest: I previously held a role in Zero Waste Scotland.

I have a couple of points to make on oil and gas decommissioning. Can the panellists provide an update on Scotland's ability to decommission a platform via the single-lift method as opposed to piece large decommissioning or piece small decommissioning? What are your thoughts on the utilisation of an electric arc furnace for recycling the steel from the North Sea oil and gas platforms that are coming here?

Rebecca Walker: On Scotland's capability to use the single-lift method, could I provide written evidence at a later date, so that you have accurate details?

The Convener: Yes, that would be excellent.

lain Gulland: I am sorry, but I do not have that information either.

The use of an electric arc furnace to recycle the steel from oil and gas platforms is a live proposal that we and other partners have looked at. We have done high-level feasibility work to understand what the inputs and outputs would look like and how the electricity to power it could be generated, particularly from renewables and within the carbon envelopes that we would all like to work in at an industrial and a national level here in Scotland.

It is definitely feasible to have such a project in Scotland. A number of partners would need to come together to have a broader discussion about how that could be done. We are involved in such a discussion; I am sure that others are, too.

Claudia Beamish (South Scotland) (Lab): I am pleased that the convener has raised the decommissioning issue. I direct my question to Rebecca Walker, and possibly to lain Gulland. The council representatives might have a view, too, so I ask that any responses be kept brief.

I am a bit concerned about the time trajectory for decommissioning in the oil industry, the development of marine renewables and the move to a low-carbon economy. Rebecca Walker mentioned—I cannot remember the exact words—what we could do in Scotland and what would have to be exported. It seemed as though it was a fait accompli that some reprocessing would continue to be exported. Will you comment further on that, please?

Rebecca Walker: At the moment, we do not have the facilities for reprocessing in Scotland.

Claudia Beamish: I understand that.

Rebecca Walker: We are focusing on making sure that we can bring the material into Scotland and on the added value that we can get from it here.

On investing in Scotland, we must give regulatory certainty in order to attract businesses. I cannot comment further. On the global markets within which we work and the associated energy costs and labour costs, we are looking at all options that get the best value for Scotland's economy and environment. We are working with partners on the issue. We have been working closely with Zero Waste Scotland, the Scottish Government and the enterprise agencies.

The Convener: Will you clarify that point for me? My understanding is that the oil companies

will take the rigs to wherever is nearest for decommissioning purposes. Would we have sufficient raw material available in Scotland to justify the spend on the infrastructure that would be required?

Rebecca Walker: I do not have the detail, or a cost benefit analysis, on that. I would be happy to see whether we can get that information for you.

The Convener: It would be useful to have that. Thank you. Let us move on.

Mark Ruskell (Mid Scotland and Fife) (Green): I return to the issue of households. I have a question about the charter for household recycling in Scotland, which has been touched on briefly. Is the charter significant in driving up performance on the recycling rate? Are there any conflicts in the charter? For example, one of the high-level outcomes is about quantity, and ensuring that there are high quantities as well as high quality. I am just wondering if there is conflict between those objectives. The third objective is about cost effectiveness. I am interested in your views on the extent to which cost effectiveness means high quality and high quantity.

Tony Boyle: In short, the waste charter says that we should give a wider range of recycling facilities to more of the public. When we introduced kerbside recycling initiatives to properties in Glasgow, we noticed that, if people were given a dry mixed recycling blue bin, they used it more. We have tried to separate recycling through public sites before, but the problem is how to do that in practice equally for all residents. It is very difficult. The biggest challenge for Glasgow is that it is not cost effective to roll that service out.

We have introduced a food waste service, as we were obliged to do under the Waste (Scotland) Regulations 2012. The good news is that that has created 100 new posts. However, it has resulted in us having to provide a weekly food waste collection service to flats. That is the sort of thing that will be rolled out under the wider recycling charter, which is why I am using it as an example. We provide that weekly service to people who present their waste to back courts and communal bins. We pick up maybe 5kg to 8kg of waste from those bins, but there are staff and carbon issues, because of the extra vehicles that we have to use. A weekly collection is not cost effective.

The wider principle of the waste charter sounds great, but when we drill down into the detail, it is difficult to see an environmental benefit. We could look at reduced frequency of collections, for example, but I go back to my earlier point about whether the waste charter is the right fit for every local authority. I can see benefits for some local authorities but a one-size-fits-all solution will not reap the same benefits for each local authority.

Mark Ruskell: Do you see the austerity that many local authorities are under at the moment and the obvious need to make savings across the board as a significant driver? Is objective 3 of the charter, on cost effectiveness, really driving service reconfiguration?

Tony Boyle: I will let Robin Baird come in in a second, if I may. We absolutely cannot uncouple the issues. The economic pressure that local authorities are under to make ends meet is directly related to how we provide such services. Wellmeaning and well-intended initiatives such as the waste charter make it absolutely impossible for us to provide an economic service with what the residents have to pay through their council tax and what the council has to pay through the support grant to provide the service. We have wellmeaning, overarching and broad environmental initiatives, and the two things do not meet easily in the middle. We have to look a bit more innovatively at how we can create a solution that will bring both things home.

Glasgow City Council is looking at collection frequencies that are different from our current common practice. For example, it does not make sense to pick up food waste every week when there is no requirement to do so. That could maybe be done every two or three weeks. Could we get benefits from that?

Robin Baird: That is a valid question in the current financial climate, but the aim is to think and act differently. If the current funding mechanism stays in place, the answer to the question is no. Local authorities have to consider what statutory services they will not deliver, assuming that our current funding mechanism is the way that we will go. The question then is: who should pay to collect material? Should that be the local authority or should the packaging industry make a contribution, whether through a deposit return scheme or other means?

There is no doubt that waste collection is inherently underfunded—let us make no mistake about that. I was asked a question by a resident, who wanted a refund against the council tax because we missed a few collections. It turned out that the household had paid 9p per collection out of their council tax. Tony Boyle is right: that is not enough to collect the material that we need to collect of the quality or in the quantity that we need to get the investment that we need. We need to consider how we fund the service to get the best quality and the best quantity and to create the best infrastructure to ensure that everybody knows what they are doing.

If councils throughout the land are asked to pick between education and bins, guess what the answer will be: it will be education first. We need to think differently, and we need to get an understanding of the best way to collect the material. The waste charter is the first point of that.

There is a general understanding that, to get the necessary quality and quantity, we need to be consistent. To go back to the point that the convener made, we need consistency and clarity for householders to make it easier for them to comply. We then need to have the instrument that allows them to recycle or makes them understand that they have to recycle, but that might mean that the collection has to change. The collection might be expensive, but down-the-line benefits, such as economic investment in the circular economy, might make the investment in it worth while. If local authorities are doing the collection, that investment needs to be properly funded.

Maurice Golden: Mr Boyle, I am aware from working with other local authorities and, indeed, municipalities throughout Europe that the business case for introducing food waste collections can always be made by changing the frequency of other collections, rerouting and having a comprehensive communications campaign—and, in Scotland's case, by accessing Scottish Government funds, primarily through Zero Waste Scotland. I am unclear why Glasgow City Council is so different, given that other local authoritiessuch as the City of Edinburgh Council and Inverclyde Council, which has many of the same types of housing stock—have managed to roll out recycling infrastructure and are doing well on it. I appreciate that prices for recyclate are low at the moment, but I expect that they will rise in the long term, so it would make sense to have the appropriate collections and infrastructure to accommodate it. Will you clarify your previous comments?

Tony Boyle: The volume of food waste that we pick up is similar to that of most local authorities in Scotland, but it is not high. I do not think that any local authority in Scotland picks up high volumes of food waste.

You are correct to say that there is an issue with wider recyclates. There is market volatility in trying to get rid of them, find the best use for them and find the best income from them. If the deposit return scheme were to be introduced successfully, we would lose $\pounds 450,000$ of income per year, based on last year's figures.

In Glasgow, we have unique issues with housing. No other local authority in Scotland has the number of flats that we have, and we are unable to resource collection at flats as we can for the kerbside properties. That presents unique challenges. For example, if someone lives in a flat, they will use a communal bin. There will be perhaps six 240 litre communal bins per close and two 240 litre recycling bins for dry mixed recyclate, but there is no scope for glass bins. We have

recently introduced food waste recycling. It is costing the council between £4 million and £5 million a year just to introduce that new service, and that is a major burden for us.

Maurice Golden: Why do communal bins and recycling infrastructure work in Helsinki and Greenock but not in Glasgow?

Tony Boyle: That is a really good question. Part of the reason goes back to behavioural change. We have introduced the service in a well-meaning way and we follow the legislative obligations, but we are finding it really difficult to get residents to take up the challenge of recycling. That is probably the biggest reason.

Robin Baird: The funding that Maurice Golden mentioned was de minimis. That meant that the collection was in place, but the funding was going to run out. In Falkirk, we were able to afford the collection by going to four-weekly residual waste collections. I do not need to tell anybody round the table how politically sensitive that was at the local level. Falkirk certainly felt isolated and scrutinised when it made that decision.

Would I recommend that a fellow local authority do that? It is tough—that is what I am saying. It was left to an individual local authority to stand up and make that decision. That is very tough at the local political level. I throw the question back to the committee. If the issue is truly serious, tell us that it is serious and commit to that as the way to deliver things. That will make implementation a lot easier at the local level.

10:30

The Convener: I ask the other witnesses to respond to Mark Ruskell's question.

Mark Ruskell: If you can remember it—it was on the waste charter. You can make comments in response to the question from my colleague Maurice Golden, as well.

lain Gulland: I do not want to have another go at Glasgow, but Tony Boyle made comments challenges around about the potential environmental impact or disbenefit of recycling. I want to be clear that, in almost all situations, recycling is better than landfill or disposal. It is not about the vehicles in the city or the vehicles that do the collecting; the real impact is in how materials are formed in the first place, how the products are consumed in the home or in businesses, and how they are dealt with later on. The environmental impact of all that is significant, and that is why recycling is so important. I do not want there to still be the idea that driving a car to a local glass bank causes more damage to the environment than not recycling the glass-such ideas are just myths. Recycling is really important.

Prevention is even better, but when you get into managing waste at the end of the pipe, it is very much about recycling.

I support my colleagues from Glasgow City Council and Falkirk Council on the issue. There is a real challenge. Because of the environmental impacts of recycling, everybody knows that it is the right thing to do. After waste prevention, recycling is what we should all be doing, but we need to understand how we can afford to do it. We need to discuss whether it should be done through the public purse, the private sector, producer responsibility or another mechanism. How can we afford the system that we want in Scotland and how can we ensure that it is flexible enough to deal with all the other materials and products trends that we will be buffeted by?

There is an infrastructure opportunity. That is what the charter and the code of practice are all about. They try to bring a bit of consistency to what is, to all intents and purposes, a resource grid in Scotland. We have materials in Scotland and we need to bring a bit of consistency through the pipe—through the collection infrastructure—so that we can realise many of the real opportunities in processing the materials. That is about taking on quality and consistency of supply issues. The charter is all about working with local authorities to provide some certainty about those materials and the marketplace, not just so that we can get a good price for those materials in our export potential but, more important, so that we can attract inward investment and stimulate Scottish companies to do more with the materials because they have a bit of ownership of the supply. That is a challenge in working with local authorities on their budgets, but it is an opportunity at Scotland level to start to understand what the infrastructure could look like.

Tony Boyle mentioned underground containers. All sorts of infrastructure is available; it can be seen abroad, in other parts of Europe and elsewhere.

We need to consider the physicality, as well. How do we want our materials to be stewarded in the future? How do we want to steward the materials that are being used at the business level or the consumer level in households for the benefit of Scotland? Those are big challenges. We need to design a system around the opportunities that a circular economy brings us, which are very visible after the analysis that we did of key sectors, materials and opportunities. The issue is how we work with local authorities as a totality to ensure that we can reap those benefits.

Rebecca Walker: I absolutely support what lain Gulland said about consistency, quality and increasing quantity. SEPA is the environmental regulator, so we see the problems much further

downstream, but we recognise that, in order to improve quality and consistency, we need to address the problems upstream through initiatives such as the household recycling charter. For instance, we are looking at material quality and levels of contamination in what goes into and out of the material recovery facilities that we regulate, and we will publish a report on that in July.

We also have a role in transfrontier shipments of waste. At present, the UK and Scotland do not have a good reputation because of the quality of the materials that are sent abroad, and we are repatriating containers. That is to the cost of the Scottish economy. We try to work with brokers, those who are involved in shipping and people across the supply chain as well as with householders on source segregation through partners such as Zero Waste Scotland and the local authorities to ensure that what we send abroad is of the highest quality. We can improve our reputation by improving the quality of the materials that go abroad as green list exports to be recycled and reprocessed.

Mark Ruskell: We have come from a low baseline and we are now up to 44 per cent of household waste being recycled. From what is being said, my sense is that a lot of the low-hanging fruit has gone. We need to get up to 60 per cent in the next five years. What one change is required to achieve that? Can we go along panel members quickly?

Tony Boyle: I support the waste charter-I hope that the opposite has not come across—but there are issues for local authorities. We have worked autonomously to try to bring forward solutions, and seven or eight years ago we got into a strategic partnership to develop a residual waste treatment solution, which we will open next year. In simple terms, the waste that goes into general waste bins has within it rich recyclate that is not being recycled. That will now be segregated through mechanical means. There will be a smart materials recycling facility and an anaerobic digester to deal with organic material. We will be able to divert something like 80 per cent of what would usually go to landfill and improve our recycling by about 18 per cent from the throughput.

Part of the issue that we have is that we are already committed to strategic partnerships for 25 years, and those partnerships were put together before we started to develop the waste charter. There is room for both, and it makes sense to have both, but we are committed to providing to that project a certain level of material of a certain type of composition.

Mark Ruskell: Okay. So that is a large strategic materials recovery facility for dealing with residual waste.

Tony Boyle: It is residual waste treatment. It is not just a MRF; there is also an anaerobic digester.

Mark Ruskell: Yes. Do the other witnesses have views?

Robin Baird: We need to complete the circle of responsibility. I have mentioned this at a number of conferences. Everyone has a responsibility and a part to play, and we need to make it clear who is responsible at each stage.

The householder is responsible for using the services that are provided. There is no get-out-of-jail-free card and we should not say, "If you really want to, please use this service." At the same time, manufacturers need to understand that they should produce only products that can be recycled or reused, and retailers must understand their responsibility to communicate. We all talk about communication, and the onus seems to be on local authorities, but we do not sell the goods that people buy. There is an opportunity for retailers to communicate to their customers that they have a responsibility.

We need to complete that circle and ensure that everybody in it understands their responsibility.

Mark Ruskell: What does that actually mean? What would it look like to a householder? Should there be a sanction or a tax?

Robin Baird: It can be one of two things. "Sanction" is a hard word. I do not think that any of us would want to take somebody to court for putting a glass bottle in a general waste bin. It is people understanding what responsibility is and what they have to do. For example, we empty residual waste every four weeks. If someone does not recycle effectively, they will struggle. That is a way to move things without there being a sanction as such. This is about what sustainable waste collection services will look like in 2020 and beyond. Sometimes we can get stuck in the here and now and not think about what the will future look like.

Tony Boyle made a valid point, and Iain Gulland alluded to it, as well. All the economic models assume participation. If everyone uses food waste collection, it makes economic sense, but only 40 to 45 per cent of people use it. It does not make economic sense unless it is fully utilised. The householder needs to understand their responsibility but, at the same time, the waste collector, which might not be the local authority, needs to understand their responsibility to provide consistent collections that allow for quality and quantity to be delivered. Everybody has a role to play and everybody needs to clearly understand their role and their contribution.

Mark Ruskell: Okay. Do the other witnesses have views on the top change in approach that is required?

lain Gulland: Our position is similar. To some extent, it is about further engaging the citizen and businesses on their obligations or responsibilities on the bigger picture, climate change and the opportunities from a circular economy. That might be the local message that people do not hear or understand. The public are still very uncertain about what happens to their recycling and where it goes. We need to get that message out and engage with people. That is a big exercise at both the local and national levels, and it will take resources.

We need to understand how we invest in the area and what we already have. A lot of the solutions are technically feasible with the infrastructure that we have. We can look to other countries. Wales, for instance, has higher recycling rates even though its local authorities are technically doing basically the same as the ones that are represented on this panel.

We can get there, but we need to invest continually, including in the running costs. We need to innovate and look at different ways of collecting material and engaging with the citizen. Obviously, Zero Waste Scotland and other partners have key roles to play, too. The question is how we work with and support local authorities. As Robin Baird said, the challenge is in who else is coming to the table—it might be producers—with financial support or support through their own channels.

We need to understand that everyone has a role to play and that everyone should have an ambition to get behind and support this work, because we are talking about infrastructure for Scotland's economic, social and environmental benefit. We should all see that continuing to invest and innovate in our infrastructure is a responsibility that we all have. Taking such action also shows Scotland's leadership to people across the globe.

Rebecca Walker: Partnership working is important in order to deliver those economic, environmental and societal benefits. We must understand the knock-on impact that an intervention or a system that has been brought in has on the other parts of the supply chain. By working together, we can get all the right tools, the right interventions and the levers in the right place in order to understand that and maximise the value that we get from our materials and resources.

The Convener: I know that Mark Ruskell has further questions. Before we continue with those, I will take brief supplementaries from Claudia Beamish and Finlay Carson.

Claudia Beamish: I ask the panel to return to Robin Baird's earlier point that the regulations place a duty on all waste producers except householders. Does that exemption need to be revisited?

The Convener: I will bring in Finlay Carson here, so that the panel can answer both questions at the same time.

Finlay Carson (Galloway and West Dumfries) (Con): My question is about the new plant that has been mentioned that would better separate out waste from the main bin. Does that not send out the wrong message, which is that we are not going to change the culture and how people behave, and that we are moving away from an emphasis on kerbside recycling back to a situation where everyone is allowed to throw whatever they like into a bin and we will leave it to the council to sort it out?

Tony Boyle: It is quite possible that such a message would be construed from that. As Robin Baird said, local authorities are left holding the baby when it comes to trying to deliver sincerely the recycling targets that we must introduce. An issue for us is that we do not have the infrastructure to support us that Falkirk Council has.

We are left with the challenge of how we get the recyclates and what we do with them. Even when we have introduced food waste recycling specific to each address in the city, we have found that 30 per cent of the waste in the general waste bin has been food. We must be pragmatic about the service that we can provide. Although we will always strive to provide bespoke recycling services, we understand that some food waste will always end up in the general waste bin. I suppose that we are trying to do two things here.

The question on regulations is interesting. The regulations must be revisited. Unfortunately, I do not know what the solution is, because I do not know how we would impose the requirement on householders were we to remove the exemption. I do not know what the big stick is, but there must be something that would compel residents to do more than they are currently doing, which, in the longer term, would get rid of all the issues that we are talking about.

The problem that Glasgow City Council has had is that we have not been able to wait. We did not know that a waste charter was coming in eight years' time. We have sincerely been trying to meet our obligations. Robin Baird's point is well made. The mistake that is made continuously is that it falls on the council to be Big Brother.

More has to be done about the universality of the responsibility of the producer to the resident. The local authority also has a role, but we seem to be the fall guy for all the problems. We reduce collection frequencies for the right reasons, but things are always perceived as being the council's fault. We try to run on a meagre budget, at times. There has to be investment, but primarily we should look at the regulations. Unfortunately I cannot advise on what sanction you should introduce that would be either meaningful or fair.

10:45

Robin Baird: Because I rant about the regulations more than anyone, it is probably good that I answer Claudia Beamish's question, and my answer is: absolutely and without question the exemption needs to be revisited.

The analogy that I give is the smoking ban that the Scottish Government brought in. If the smoking ban had been a regulation that said "Please can you not smoke in the restaurant?", what would have happened? Would we have seen the significant impact and change that means that we can all go out to a pub or a club without coming home smelling of smoke?

We are talking about behaviour change, and recycling is no different. If we are serious about our environmental credentials, we need to say that recycling is not voluntary. Five times a week I hear people say that they are doing the council's job for it by recycling; I am sure that Tony Boyle hears that too. I disagree: people are doing their own job because managing their waste is their responsibility. The council will support them to make the right decision.

Mark Ruskell: I will move on to organic waste—garden and food waste. You have mentioned some of the challenges around collection. Do you want to add anything about what the opportunities might be? My sense is that we are seeing an evolving model of food waste collection, but that quite a few local authorities are rolling back on garden waste collection. Is home composting part of the solution? What is the optimum mix?

lain Gulland: The food waste collection infrastructure is now very much in play in Scotland. I think that more than 80 per cent of households now have access to it, which was the plan. Rural parts of Scotland are exempt, so approximately 1.9 million people have access to a food waste scheme. Some schemes are only just bedding in, as Tony Boyle mentioned when he was talking about Glasgow.

Food waste collections are increasing and, as in any of the systems that are in play, work has to be done on participation rates. It is not just about rolling out a service or introducing a box, bin or caddy to householders; it is about getting them to use it regularly. I acknowledge that a lot more work has to be done on that.

Commercial food waste regulations have kicked in and, although I think that there is a lot more participation among larger businesses, there is probably still some work to be done on some of the smaller food premises on the high street. Rebecca Walker might want to talk about that.

Things are generally moving in the right direction, but as Robin Baird said, we still need to engage with people about food waste and the importance of the kitchen caddy. People generally want to do the right thing when they are given a suite of bins: they want to do the right thing for the environment and the local economy. There are also social opportunities for people; it is an engagement opportunity, and an issue of communication.

Food waste management is beginning to be accepted, which is a good thing. The issue of food waste is now on television, and there have been debates in Parliament on the issue and the challenges that it presents. Scotland has a target of 33 per cent—that is the real challenge.

We introduced the food waste caddy to households in Scotland but we are now trying to reduce its usage—not the participation rates but the amount of stuff that has been going into it since it was first introduced. That is unusual, because all the recycling systems that councils have introduced have tried to maximise the amount of material that people put in the caddies, and now councils are actively trying to reduce that.

That might be one of the challenges for the future. The amount of food waste that is coming to councils, even those that are working with Zero Waste Scotland, and the amount that comes out of households in the future might be less, because we are beginning to see a reduction in household and commercial food waste. That is good for individual businesses and the economy because they are making environmental savings and cost savings.

A lot of councils introduced a garden waste collection initially; they are not obliged to provide it, so some have decided to charge residents or to reduce its availability and provide increased capacity at civic amenity sites or household recycling centres. Progress in home composting has been encouraging. Those are solutions, but the optimum mix involves engaging with householders and communities on which solutions are best for their situations.

Rebecca Walker: SEPA's focus, given our regulatory role, is on commercial food waste. We have seen a huge increase in segregation of food waste due to the waste regulations. Over the past year, we have used our new enforcement powers for fixed monetary penalties in a campaign to tackle waste producers that have a duty to recycle.

We tackled 73 persistent offenders about their compliance, and just the threat of a fixed monetary penalty has changed behaviour. We issued two fixed monetary penalties during the campaign.

Food waste is increasing from food businesses across Scotland. The second largest commercial and industrial source of waste is food and drink manufacturing. Although we collect that waste for recycling, it is important to make sure that we have the right infrastructure. We are working with the industry and Zero Waste Scotland to ensure that we get maximum value for the circular economy from all that organic waste by keeping it out of landfill and using it for soil restoration and agricultural benefit.

Mark Ruskell: We will come to infrastructure later.

Claudia Beamish: I wanted to get lain Gulland to comment on my previous question about revisiting the regulations, but I did not mean to interrupt; I apologise.

Robin Baird: Iain Gulland mentioned that garden waste collections are the only non-statutory service collection that councils provide and, under the waste regulations, councils are within their rights to charge for its collection. That is quite well established down south, but in the 32 local authorities in Scotland that service is at severe risk, in the next 18 months to two years, of being either stopped or charged for. There is no question about that.

My telling stat on food waste is that, when Falkirk Council operated a residual waste collection every fortnight, we collected 0.6kg per household. When we moved to a three-weekly residual waste collection, we collected 1.2kg of food waste per week. When we moved to a fourweekly residual waste collection, just under 1.6kg of food waste was captured per week. The leaflet was exactly the same, so what changed the behaviour? It was not the communication—I am not saying that I came up with a great communication method, such as a great tool, leaflet or interactive app. Only one thing changed to shift people's behaviour, which was that we went from two-weekly to four-weekly collections; the data is quite clear. People kind of know what they need to do, but they do not necessarily do it.

The Convener: Claudia Beamish would like lain Gulland to respond to her question on revisiting the regulations.

lain Gulland: Is the question whether we should review the regulations with regard to householders?

Claudia Beamish: Yes—the exemption for householders.

lain Gulland: I struggle with the question slightly, because I am trying to imagine what that change would look like in practice and how it would be enforced.

The other part of the answer is that I believe in using the carrot before the stick. With respect, we could probably make more effort, at individual household level, and with citizens communities, to inform them of their responsibilities—or potential voluntary responsibilities—with regard to climate change, recycling and waste prevention.

I get the points that Robin Baird is making, but I still think that there is a lot more that we could be doing to encourage participation at a community level and otherwise. I would not say that we need to repeat the same narrative, but we could change narrative slightly to promote opportunities-the jobs, and the social benefits of what we are trying to achieve—at a local level. It is a missed opportunity. Our narrative has changed from simply trying to recycle because we need to get stuff out of landfill to recycling because it is the right thing for the environment and to recycling because it is the right thing for the environment, the local economy and tackling some social injustices.

There is a real opportunity to re-engage with people. People like to know what is happening to their materials and why they are getting involved, so my first response is that we can do more than simply look to legislation.

Claudia Beamish: That is optimistic.

lain Gulland: I know. I am sorry.

Claudia Beamish: I do not want to detract from that, but why should householders be the only ones in the whole chain who do not have a statutory responsibility?

Robin Baird: Rebecca Walker mentioned that the threat of a penalty notice had a huge impact on businesses. We cannot issue such a threat to householders, so why are businesses not afforded the same opportunity to get on board? We will serve a notice on a business—if you run your own business, we can serve a notice on you. With a householder, we would have to send round an officer—and we do not have many of them any more—to say, "Please".

My argument has already been set out. The threat of a notice was quite a force for a business to recycle. Are we overthinking this? The threat of something can sometimes be effective. We did it down south with the Clean Neighbourhoods and Environment Act 2005, which gives local authorities the ability to serve a penalty on householders. I am not saying that we will do that, but we have to engage with householders. I have

sent an officer nine times to one area to engage with the public and to have individual and group meetings, but it still does not have an impact. How many times is enough? If the threat is effective for businesses, why would it not work for householders?

Mark Ruskell: I want to ask lain Gulland and Rebecca Walker about packaging. Where do you see the greatest opportunities to reduce packaging waste, and what kind of initiatives are already under way in relation to producer responsibility, so that we can try to get a grip on that?

Rebecca Walker: SEPA administers four producer responsibility compliance schemes, packaging being one of those regimes. In 2015 alone, we saw 7.4 million tonnes of packaging recycled and taken out of the waste stream, financed by the producers, and that covered paper, aluminium, steel and other types of packaging. We should celebrate what the packaging regulations have already achieved, because that is a success, but there is always room for improvement and we could be doing a lot more to work with other UK Administrations to achieve more through the packaging regulations.

lain Gulland: Quite a lot has been done on packaging, particularly food packaging, and a lot of it is probably happening under the radar. We have worked with colleagues in other parts of the UK through the waste and resources action programme and through a commitment with the main retailers, called the Courtauld commitment, which focused on reducing packaging. A lot of work has been done on numbers, through lightweighting of packaging and changing of formats, which is probably not easily recognisable when you are walking up and down in the supermarkets, as I know even from my own point of view. However, a lot has been done by the industry, and that has been driven by a voluntary commitment by the main players in all the sectors to reduce packaging.

There is also recognition that there is a business case for reducing packaging, in terms of the volumes that are being trucked around the country, and lightweighting obviously affects carbon emissions. Quite a considerable amount has been done, but that is not to say that no more needs to be done. My conversations with retailers and producers prove to me that they are very focused on their packaging. More importantly, they are trying to understand how they can reduce the carbon footprint of their packaging even further, and they are focusing on the recycled content of that packaging, because that is the biggest way in which they can reduce the carbon footprint of the materials.

To go back to the point about infrastructure, where does that material come from? How can

people access clean, good-quality plastic flake, glass or card to introduce recycled fibres or material into their packaging, get that back on to the shelf and make it available for recycling? The recycling systems are available and the will to recycle exists among packaging producers, but there is a real challenge. We can set targets to have 30 or 50 per cent recycled content. Such targets are already considered, and a lot of the industry suggests them, but accessing materials with the right quality to put them into products is a real challenge.

11:00

The infrastructure needs to be joined up. How do we in Scotland supply raw material to industries that are looking for it? There is demand. The clear example in Scotland is the whisky industry. One of its biggest challenges is to reduce the carbon footprint of its packaging—its glass—and sourcing good-quality flint primarily for clear glass to reduce the carbon impact of its glass bottles. It has done a lot of work on lightweighting. We have done significant work with that industry over the past couple of years, and a lot of the main bottles are much lighter than they were. It is technically feasible to get more recycled glass into them. One of the real challenges is how to source that glass from a local base, particularly in Scotland, where the glass bottle manufacturing for the whisky industry is primarily based.

That is one of the challenges. We really need to try to join up our infrastructure and the quality and supply of material to people who are already deciding they want to drive up recycled content.

Maurice Golden: The next questions are on waste treatment infrastructure. I will direct them to lain Gulland and Rebecca Walker in the first instance but, if the local authorities would like to chip in, they should flag up that they want to do so.

We would like to cover four areas in a quite snappy fashion. First, we want to look at infrastructure in general; we then want to look specifically at incineration, exports and the opportunities around particular materials.

lain Gulland, do we have sufficient infrastructure to meet Scottish Government targets?

lain Gulland: The simple answer to that is yes, because infrastructure is available. There is also an opportunity to export material for energy from waste. If there is an oversupply of material for energy from waste, there are overseas markets, particularly in the rest of Europe. That is an opportunity.

We have talked about the trends in waste composition and its volume and quality. What infrastructure do we require immediately and going forward? Tony Boyle has already talked about Glasgow's 25-year commitment. The facilities are long-term ones. The issue is whether we want capacity that fits our future needs or our immediate needs, bearing in mind all the things that we have talked about that we are trying to achieve in Scotland.

On the targets, facilities are available. It could be argued that we should do more with waste material in Scotland. That would need the development of more infrastructure over the next five years, but is that what we are really trying to do if that ties us in to 25 years beyond that? That is a 30-year horizon. The real trick is to really think about what infrastructure we need in the future and not tie us in to something that will limit our recycling ambitions and—I have said this before in the Parliament—result in our becoming an outrider in our low-carbon ambitions. With respect, incineration in terms of CO₂ emissions per kilowatt hour is still very high; it is currently higher than the average with our shift renewables. The more of those plants we have in Scotland, the more outriders we will have, and the more Longannets of the future for energy from waste we will have. From an energy or low-carbon point of view, we really need to consider that they could cause us longer-term issues.

That is the simple but long-winded answer.

Maurice Golden: Just to push you a little further on that, the Scottish Government's current estimate is that incineration capacity will go up 12.5 times in the next five years. As you have pointed out, that ties in Scotland for up to 30 years. How does that bear on the target for a recycling rate of 70 per cent in 2025?

lain Gulland: At the moment, we are focused on the recycling rate to get as much of the high-value material out as possible. That is what the systems that have been put in place in the public and commercial sectors are for. I guess that the question is whether hitting the 70 per cent target will leave enough material to be fed to the incineration capacity. To go back to a previous point, that might be affected by increased waste prevention. However, the numbers are modelled regularly by us and SEPA and in the Government analysis to try to understand not just the final picture but how the picture will evolve over five years and beyond that.

Maurice Golden: Can you outline what that shows? Are we right to increase incineration capacity by 12.5 times over the next five years, or should we focus on exporting that waste, as that provides flexibility for Scotland and the councils and would ultimately give the ability to meet targets and move in a faster manner? I say that because, when I talk to colleagues in Europe, they tell me that we should learn from their mistakes

and should not build incineration capacity, because we will struggle to fill it in 10, 20 or 30 years.

lain Gulland: I ask Rebecca Walker to give us the numbers. You have talked about an increase of 12.5 per cent, but my understanding—

Maurice Golden: It is 12.5 times.

lain Gulland: Okay, but that is from a very low point. It is about how the actual number relates to the material that is available.

Rebecca Walker: I am happy to come in on the numbers. In construction, we have four energy-from-waste facilities that have a total capacity of around 945,000 tonnes, or just under 1 million tonnes. On meeting the targets, we could have capacity in Scotland for just over 1.5 million tonnes. Therefore, at the moment, we are at a very low risk of overcapacity in relation to construction. That gives us the flexibility that has been mentioned in terms of what goes abroad. At the moment, we send 200,000 tonnes of RDF—refuse-derived fuel—abroad, to countries that have capacity in energy-from-waste facilities.

We are not locking ourselves into overcapacity—at the moment, there is a very low risk of that. As lain Gulland mentioned, Zero Waste Scotland, SEPA and the Scottish Government carry out regular modelling of the infrastructure that we will need in future. We need to think about not just what we need now but what we will need in 30 or 40 years.

bRichard Lyle (Uddingston and Bellshill) (SNP): Where are the four incinerators that you mentioned? We seem to speak flippantly about incinerators, but some people are very concerned about them being built right beside where they live. What would you say to those people? Fifty years ago, we burned rubbish in a fire, but nowadays we want to burn it in an incinerator that is 200 yards away from houses. I am thinking particularly about Whitehill in Hamilton. Why would we want to do that?

Rebecca Walker: In terms of regulations, we are in a very different world from the world decades ago. We regulate incinerators to strict emission limits and we look at the energy that is recovered from them efficiently. The regulations set very strict emission levels.

Richard Lyle: So why do people not believe you?

Rebecca Walker: On the public perception of incinerators, there is a historical legacy—

Richard Lyle: Sorry to interrupt, but I will be brief. I was a councillor for years and I used to deal with an organisation called the Association for Public Service Excellence. I agree that things are

getting better, but how do we say to people that we want to incinerate and to build a plant right next door to them?

Where are the four sites that you talked about?

Rebecca Walker: We have a site in Edinburgh, at Millerhill, one in Dunbar, one in Glasgow and one in Levenseat.

Richard Lyle: If there is a site in Glasgow, why we do we need to build one in Uddingston and Bellshill?

Tony Boyle: Perhaps I can answer that question. We do not recognise the term "incineration"—we call the process "gasification". I am not trying to be clever; I am just trying to answer your pertinent question about the difference between what we do now to household waste and burning stuff on the fire.

That waste is now controlled in a 21st century way. We have a residual waste treatment solution in which Glasgow's waste has been capped at 200,000 tonnes. That is partly because this cannot be the be-all and end-all for the waste; we have to continually challenge ourselves with regard to recycling. As we mentioned earlier, we produce anything between the 265,000 tonnes of waste that was produced last year and the 350,000 tonnes that was produced 10 years ago, and we have built on our legacy for the future by continually challenging ourselves on recycling.

The residual waste treatment plant, which is known as the Glasgow recycling and renewable energy centre, smart removes all the dry mixed recyclate that can be removed; organic material goes through anaerobic digestion; and the last port of call for the rest of the material is the gasification process. It involves a whole range of chemical processes that, to be honest with you, is beyond me, but how the stuff—the noxious substances and what have you—goes into the atmosphere is strictly monitored and controlled. That is a key part of the package for Glasgow.

Coming back to Mr Carson's question on whether attempts to introduce such solutions are diametrically opposed to, say, trying to do more with wheelie bins, I think that what we are trying to do is build for the future and strike a balance between maximising what we get from recyclate and avoiding having that one-stop shop at the end.

The Convener: I must ask other witnesses to be very brief, because we are up against it timewise.

Robin Baird: I want to come back to Maurice Golden's question about exports. We need to be very careful about exports, because they are factored on the pound's performance against the euro or the dollar. After Brexit was announced, the cost of exporting increased by 23 per cent

because of the fall in the pound. I also point out that there is a reason why Scandinavian countries are seeing benefits from their approach. They might have slight overcapacity, but they understand the heat generation benefits that can come from energy-from-waste facilities which, in some cases, are located in and are heating city centres and town centres.

We must be very careful about relying on exports for two reasons. First, the rest of Europe knows that we have a biodegradable waste ban coming in 2021; if we get to that stage and we do not have enough capacity, they are going to hold us to ransom, because they know that we cannot send the waste to landfill and that we have to export it. Moreover, we need to draw a clear distinction between planned consent and actual infrastructure. There might be a perception that the projects under planned consent mean overcapacity, but how many of them will hit the ground come 2021 when we cannot do anything else and are being held to ransom by our European neighbours?

lain Gulland: I would counter that argument by saying that, at the end of the day, quite a lot of the facilities in Europe are crying out for waste. I hear Mr Baird's point about those in Europe holding us to ransom, but the fact is that getting hold of waste from around Europe—the eastern part of it as well as us—is a cutthroat business in mainland Europe. There is also an export market down south, too, and people there are very concerned about overcapacity with regard to materials. I am sorry, Robin, but I just do not think that our being held to ransom is as much of a real and present issue as you say it is.

To be honest, I am not a fan of incineration. In a previous role, I was in this room, giving evidence on all aspects of it, including making the point that we were locking up materials that could be stimulating investment and economic opportunities for Scotland. There are real and present issues in that respect that need to be addressed. The question, though, is this: if we are to have incineration, how do we engage with communities, and how do we get people to understand that there is a strategy here? The reason why some of these plants are in cities is that they feed district heating systems; indeed, there is a very successful system in Shetland that provides heat and power to the hospital. There are good cases in point in other European countries, where people have gone to communities and asked, "Would you like a district heating system that allows you, local businesses and so on access to power at cheaper rates?" I guess that that would be more of a selling point; it is not selling something to people that causes pollution or which will impact on their health. After all, as Rebecca Walker has said, the monitoring of incinerators is far in excess of what it used to be.

Having said all that, I think that a longer-term issue for Scotland is to look strategically at what we need and what the infrastructure looks like now. How we can wean ourselves off it, if we have too much of it? As we said, if we lock it in we will miss opportunities in the circular economy for recycling and jobs creation here in Scotland. More importantly, that would start to impact on our climate change ambitions.

11:15

Maurice Golden: It would be helpful if Zero Waste Scotland, perhaps in conjunction with SEPA, wrote to the committee to outline some of the points that you made about the future infrastructure map for Scotland.

I want to touch on a couple of materials, particularly food waste. According to SEPA's waste data analysis, about 1 million tonnes of food waste is currently not being captured and processed. With respect to that, how will we cope with the landfill ban that is coming into force in 2021?

Rebecca Walker: We are working with Zero Waste Scotland, the Scottish Government and the industry to develop guidance in preparation for the landfill ban. That is alongside looking at all the infrastructure that we have. All biodegradable municipal waste—black bag waste—will be banned from landfill from 1 January 2021.

Maurice Golden: Do we have enough infrastructure? It is a very short timescale—the ban comes into force on 1 January 2021. If the infrastructure is not there now or will not be available by then, there could be an issue.

Rebecca Walker: With the energy-from-waste plants in construction and the option to—

Maurice Golden: So we will be burning food waste.

Rebecca Walker: It is biodegradable municipal waste—black bag waste from local authorities. We have a focus on reducing the residual waste and pulling out the food waste, and we have tools such as local authority household collections and how the Waste (Scotland) Regulations 2012 deal with segregating food waste. Segregating biodegradable municipal waste comes first. We will always focus on reducing and recycling food waste and dry recyclate before sending any residual waste to landfill or, from 2021, to energy-from-waste plants.

Maurice Golden: What about in rural areas, where there is currently an exemption from the requirement for separate collections of food

waste? Do you see more of a challenge there, or is there an opportunity to build infrastructure in rural and island communities such as Orkney?

lain Gulland: Are you thinking about energy from waste?

Maurice Golden: No—I am thinking about anaerobic digestion.

lain Gulland: I will go back to the point that Mark Ruskell raised about future infrastructure, particularly for garden waste. In a previous role, I encountered а challenge to community composting initiatives around Scotland. When councils started to take in garden waste in their collection infrastructure, that took away the feedstock for those initiatives in a number of geographical communities, some of which are in rural parts of Scotland. There could be a reversal would see councils working collaboratively with communities and others to bring in other solutions for garden waste and food waste. I believe that that could be the case in rural parts of Scotland.

We are seeing a lot of microtechnology in terms of AD and food waste processing, which presents opportunities for rural parts of Scotland. Such opportunities could be run by a local authority, a community or another provider, as the technology is very much aligned with some of the renewables companies out there.

We have been looking at what that technology looks like, how it can be applied and what is the perfect fit. As you will be aware, we worked in Orkney for a number of years on solutions for its food waste and organic material—not just from householders but from the two distilleries and the cheese and milk producers. There is fantastic interest in that that was not there before. It is about disaggregating that resource grid that I mentioned and trying to centralise that through the public system so that local opportunities arise for communities. We are seeing a lot of interest in that in rural Scotland.

Maurice Golden: This is my final question. If you could put in place one piece of waste infrastructure in Scotland, what would that be? You are not allowed to say an incinerator and I am thinking, for example, of something to do with mattress, carpet, tyres or plastics recycling.

Rebecca Walker: Something that could solve our tyre problem would be great.

lain Gulland: I could pick one thing and plastics would be an obvious answer, but actually it is the whole thing—in terms of the circular economy, we should be thinking of landing all that as a package. We should understand that we have a tyres opportunity, a plastics opportunity, a mattress opportunity and a carpets opportunity. It is an

infrastructure. Instead of picking things and hoping that they will land in Scotland, we now have enough data, enough opportunity and enough recognition of what the circular economy opportunities are for Scotland. It might not be one of each thing. We talked about rural opportunities. We can now start to coalesce around a package of infrastructure that would make Scotland drive the circular economy forward in terms of the input materials and the output materials for our economy. That is a real and current opportunity in Scotland, yet we are still just picking at things and trying to solve this and solve that. Working with our partners, Zero Waste Scotland knows that there are opportunities to make it happen. However, it must be done at a strategic level. With the greatest respect, realising those ambitions is not down to local authorities but must be done at a Scotland level.

Angus MacDonald (Falkirk East) (SNP): I turn to the issue of compliance and enforcement. I am keen to explore fixed penalty notices and other enforcement measures but, to begin with, I want to focus on business compliance rates, which Rebecca Walker has already mentioned in response to an earlier question.

The Waste (Scotland) Regulations 2012 require businesses to present key recyclables separately for collection. What are the compliance rates? On a similar topic, what are the compliance rates of food businesses in presenting waste food separately for collection as is required under the regulations?

Rebecca Walker: We have carried out more than 7,000 inspections in partnership with local authorities across businesses in all parts of Scotland. We are seeing a compliance rate of 80 per cent among those businesses, which are carrying out dry recycling and food waste recycling, depending on the type of business and their focus on what they should separate in their waste.

As I mentioned earlier, we have information from service providers and local authorities on those businesses that are consistently noncompliant. We focus our efforts on tackling those businesses. We have seen a great change with the introduction of the fixed monetary penalty threat—we saw a change to 88 per cent and then more than 90 per cent after we issued two fixed penalties.

We are seeing a high level of compliance. We can carry on with the campaign on the issue and the access to information for some businesses. We work very closely with Zero Waste Scotland on communications. Sometimes the issue is awareness and understanding and sometimes it is persistent non-compliance. We need to know when to use the right intervention and tool to

change behaviour. We have a process to tackle compliance.

Angus MacDonald: In your submission, you mentioned that fixed monetary penalties are powerful tools for increasing compliance and the figures would seem to back that up.

I have some issues in my constituency regarding non-compliance, perhaps bordering on waste crime. What are the biggest challenges in tackling waste crime in Scotland and in addressing extended non-compliance, which is an issue around the country?

Rebecca Walker: Waste crime is very difficult to measure. It is a huge problem. Detecting and reporting on waste crime is difficult because it is such a hidden issue. A recent report that highlighted waste crime pointed out that it costs the UK economy £600 million per year. We take it very seriously and SEPA treats it as a priority. We are working with industry and partners at international, national and local levels.

Recently, we conducted a perceptions study, which had 257 responses. It is due to be published in July, but some of its key messages are that crime is endemic and that SEPA should be running education and awareness campaigns on the issue and ensuring that what it is doing to tackle waste crime is more visible, as we treat it as a priority.

The respondents also highlighted the fact that reducing waste crime in industry is definitely possible. It is important to tackle the issue because, as well as protecting the environment and getting the maximum value from resources, we need a level playing field to enable legitimate businesses to thrive. We completely appreciate that waste crime is an issue that needs to be tackled, and we are treating it as a priority.

Angus MacDonald: I would like to hear the panel's views about the enforcement and compliance tools that are available to SEPA—for example, the ability to issue a final warning notice and to refer cases to the procurator fiscal—and how effective they are.

Robin Baird: I think that SEPA has the will to use the tools that it has, but I wonder whether environmental crime is taken as seriously as it needs to be when it goes to the courts. I have worked closely with SEPA in my local authority area to deal with businesses that were causing concern. However, when they have gone to court, those cases have sometimes not been treated with the severity that the action and the crime warrant.

Tony Boyle: On the point that was made earlier about the threat of the legislation and regulations, that has been significant in getting businesses in

Glasgow to do the right thing. In fact, just saying to a business that it will be going against the regulations if it does not do what we say has often been enough to get it to do the right thing.

lain Gulland: The regulatory powers that SEPA has have been well received by us. As Rebecca Walker said, our role has been to work with SEPA on the communication aspect, through our resource efficiency programme, which addresses not only energy but recycling support for businesses across Scotland. We have used that as a channel to talk to businesses directly about their responsibilities under the regulations, potential fines and so on.

Things are already happening, but more could be done. As well as SEPA officers visiting those types of businesses, there are environmental health officers, trading standards officers and a range of other public servants who should be involved in doing that, to some extent, in order to pass on the message about the responsibility that businesses have. That is particularly important for small businesses, which are more difficult to reach but are possibly being visited more often by other public servants than by SEPA officers. I know that a lot of work has been done on training on sharing information and encouraging people to talk directly to businesses. There are probably some initiatives that we could build on to make the approach more successful. Some of what needs to be done is simply about awareness raising.

Claudia Beamish: Rebecca Walker will know that the Stirling management school report suggested that there could be more detail of the recording of enforcement actions at any given site and more detail on the actual waste that is produced there, and on the waste streams. I appreciate that that might have implications for your resource capacity, but would it help the drive to tackle environmental waste crime?

Rebecca Walker: We are always looking at new ways in which we can tackle enforcement and communication around that. I have discussions with my colleagues about what we can do practically to do that, but I agree that we have to do more to address waste crime. Having education about it in order to raise awareness of the issue is important.

The Convener: Last but not least, we have David Stewart.

David Stewart (Highlands and Islands) (Lab): I have a general question. What risks and opportunities does Brexit pose for Scotland's zero waste plans?

11:30

Rebecca Walker: The European Union directives have presented us with the very strong framework that has been translated in the UK and Scotland, and we are working closely with the Scottish Government by providing technical advice on the detail of that. It is quite difficult, but we need to look at how that strong framework can continue. As I mentioned, we are lucky to have a comprehensive strategy to work to and there are Scottish regulations that we implement, but Brexit will be complicated. It is too early to say what the implications will be, but we need to be aware of all of them.

In other areas, we are assisting the Department for Environment, Food and Rural Affairs on technical capacity with regard to transfrontier shipments of waste.

lain Gulland: We are looking seriously at Brexit, including with partners such as SEPA and the enterprise agencies.

Going back to Robin Baird's point, one obvious issue is the trade of materials. Depending on what happens in the Brexit settlement, there will be an impact, positive or otherwise, on the material flow out of Scotland and on the raw materials that are brought in by industries here.

Obviously, that is all deeply uncertain, which emphasises the importance of moving toward a more circular economy in which we make more use, economically and environmentally, of the assets-materials and products-that are already deployed in our society. It is important that we make more of them and create systems that are better for the environment and the economy and, perhaps more importantly depending on the outcome, that are more resilient. I am not trying to be a doom-monger, but it reinforces the point that the opportunities are real and present whether we are in or outwith Europe and working across the UK. Brexit just reinforces the point that the direction of travel that we are on is the right one and it reinforces the need for pace.

On the other hand, because of the degree of uncertainty, we are trying to attract inward investment with enterprise partners for some of the reprocessing facilities that we have talked about. Attracting investment from Scottish companies is challenging at the moment, because of the degree of uncertainty.

The Convener: A large proportion of Zero Waste Scotland's funding is drawn from the EU so what will be the impact on your operation?

lain Gulland: A considerable amount of money—more than €30 million—is being supplied to us through structural funds up until 2018. What

happens in the future will be a result of the Brexit settlement.

That money is matched by Scottish Government money to accelerate our work so, if we do not have as much money, perhaps our pace will change. It might slow down some of our activities or reduce our ability to support some of the opportunities that we see. We are obviously very conscious of that in our discussions with Scottish Government colleagues.

It is not just about whether we spend our money, Scottish Government money or European money; it is about how to lever in other investors, whether they are venture funds, banks or other mainstream investors that invest in small or medium-sized enterprises or the infrastructure projects that we have talked about. Brexit will not impact on us in the short term, but it could start to narrow our focus in the future.

David Stewart: None of us can foresee the future with regard to the negotiations, but I assume that we might import more from non-EU countries, so there might be a big issue with plastics, for example. We might find that we take plastics from countries that do not comply with EU directives on plastics, which would cause more problems for the circular economy and not less.

Tony Boyle: As you said, it remains to be seen what will happen. We have noticed that the available markets are much more competitive than they were several years ago. Because there is so much in play just now, it is difficult to get a handle on how much we will be affected.

Robin Baird: As I alluded to earlier, when the result of the vote was announced and the pound fell, there was a hit of about 20 per cent in the cost of exporting RDF. As long as we rely on exports, we are susceptible to the risk of external influences impacting how we deliver across the spectrum and how we handle our resource.

While we have that reliance, the affordability of certain things in the future has to be in the at-risk category, if the cost model changes so dynamically. The flip side, as you have alluded to, is that such a change might create the opportunity to invest in this country.

David Stewart: A big-picture issue that concerns me is about European directives and enforcement. The European Court of Justice is the body that guards the guards. Enforcement of environmental standards across Europe is vital, but it is clear that Theresa May wants to withdraw from the European Court of Justice. Does the panel have any concerns on that point?

Rebecca Walker: As well as European law, we have case law from the UK and Scotland so, if we

withdraw from the European Court of Justice, we will follow UK and Scottish law.

David Stewart: Has SEPA developed contingency plans for enforcement in case we withdraw from the European Court of Justice? I take your point that there is Scottish and UK legislation that the courts can rely on. My point is that we have relied heavily on Europe for enforcement at a wider level.

Rebecca Walker: At the moment, we are discussing that with the Scottish Government and providing support. We have no detail yet, so it is too early to say.

lain Gulland: I am aware of those on-going discussions. There is uncertainty about how that will work. For some of the work that we are involved in, such as partnership with SEPA, issues on enforcement and regulation and business uncertainty all create uncertainty for investment. Everybody can see opportunities, but there is uncertainty about what climate we will work in for business investment and regulatory systems.

Businesses that are involved in waste and resource management are keenly observing the situation, but the detail is not available for us to strategise around. We can work up scenarios and try to understand what the evolving picture might look like.

David Stewart: I take Rebecca Walker's point that, in Scotland and the UK, we are capable of developing best practice on the environment, and there have been lots of examples about that today. One of Europe's great strengths has been best practice on the environment and practical enforcement, with a great centre of expertise in Brussels. Does any of the panel members have concerns about the loss of that expertise once we withdraw from the EU through article 50?

Tony Boyle: Our game plan works to the Zero Waste Scotland plan, which is robust and really good. Our local waste strategy, "Tackling Glasgow's Waste", is built on the premise of the keystones that are in that plan. We have no problems with moving forward with that plan over the next 10 years.

Robin Baird: A good idea is a good idea, no matter where it comes from. We may not have access to the European Court of Justice, but we will have access to the outcomes. We will still be able to learn from our European neighbours, and they will be able to learn from us, as they have done with the work of lain Gulland's team on the circular economy. It will not be a closed shop with no new ideas being shared. A good friend of mine always says that there is no need to reinvent the wheel: if the wheel is there, let us go and look at it.

Rebecca Walker: As Scotland's environment protection agency, we will continue to work in partnership with our European partners. There is definitely value in learning about best practice with European and international partners and in working together to look at opportunities and challenges to make the transition to a circular economy and relating that to Scotland.

lain Gulland: It is incumbent on us to maintain those links regardless, to ensure that we share best practice and learn from and inform the partnerships. There are opportunities at the moment on the circular economy. As members will be aware. Scotland is seen as a leading nation in the world for the progress that we have made on that and the knowledge that we have built up through our activities. We share that knowledge openly with colleagues in Brussels and around Europe but, more important, because of our knowledge, we are able to have an input into decisions in Europe on things such as standards for manufacturing and products, in relation to eco design. We can potentially influence other nation states in Europe.

If we were excluded from some of those discussions, we would still like the Scottish Government to look at the possibility of sharing or copying the standards when they come out, but—not to be naive—we would not be as involved in the actual shaping of them. Our European colleagues have valued our role in those discussions, and we are seen as a leading nation on the circular economy, and obviously we are keen to keep that going as much as possible.

Maurice Golden: I have a question for lain Gulland about future Zero Waste Scotland funding. It would be helpful if he could confirm on the record that, irrespective of Brexit, all the jobs of members of staff will remain.

Given his earlier answer, can he foresee opportunities, irrespective of the level of funding, to be without the restrictions of European regional development funding, which is focused on small and medium-sized enterprises and involves meetings, regulations and form-filling? There are opportunities to have funding without restrictions to use in Scotland as required.

lain Gulland: What do you want me to confirm about staff?

Maurice Golden: Can you confirm that all staff are permanent and will remain?

lain Gulland: I can confirm that all our staff are permanent and that they will remain for the foreseeable future.

Although we are funded by ERDF, we have other moneys from the Scottish Government that are not ring fenced for ERDF, which allow us to work with businesses outwith the scope of ERDF funding. The ERDF sum of €30 million over the next couple of years is significant and is matched by Scottish Government money. As you said, that is primarily focused on SMEs in Scotland for the circular economy and resource efficiency. We have allocated some money into the climate challenge fund to support communities that look at resource efficiency and opportunities for reuse and repair and to tackle food waste at a local level.

I accept that a bit of administration comes with European funding, but we have flexibility outwith that to provide support to other initiatives. We saw European funding as an opportunity that was worth taking on; it expanded our envelope because of what we could do with it for investment.

If there is no European funding in the future, other moneys might be available that do not have the same administration burdens—I would not say constraints. At the end of the day, we respect that it is public money, so what is good for Europe should be good for the rest of us, such as the Scottish Government. We like to think that our administrative processes, in how we set up systems, allocate funding and monitor and evaluate those, are robust, as they should be.

The Convener: I bring this part of the meeting to a close, and I thank the witnesses for their evidence. I remind those who have undertaken to write to the committee to follow through.

I suspend the meeting briefly to change the panel.

11:43

Meeting suspended.

11:50

On resuming—

The Convener: Welcome back. We will now take evidence on waste in Scotland from our second panel. Jim Brown, who is commercial director of the Binn Group, is just about to join us. Linda Ovens is director of Entec Solutions, Barry Turner is from the British Plastics Federation and Martin Grey is from Viridor. Welcome to our meeting, and thank you very much for your attendance.

Kate Forbes will ask the first question.

Kate Forbes (Skye, Lochaber and Badenoch) (SNP): I will start with a very broad question. What trends in waste generation do you envisage in the coming decade?

Linda Ovens (Entec Solutions): I am happy to take that. The committee heard from the first panel

about the trends over the past 10 years. Over the past four to five years, things have levelled out and there has been little change, if construction and demolition waste—which is dependent on the economy—is excluded. The position on other types of waste, such as commercial waste, industrial waste and household waste, is pretty settled. That is a good place to be, and I think that the position will continue to be settled.

We used to talk about housing growth and general growth affecting waste arisings. As lain Gulland said, there has been a decoupling of those two. Although I would like there to be a decrease in waste arisings, household and economic growth have some influence on them and they will remain pretty stable as we move forward.

Martin Grey (Viridor): That is absolutely the case. Over the past number of years, there has been a change in the composition of waste, and I think that that will continue as the circular economy embeds itself. I will make a simple observation: how we collected glass in Scotland five or 10 years ago is very different from how we collect it now, just as what we used to do with plastics is very different from what we do with plastics now. We think that that innovation will continue over the years ahead. We are doing some really good work at a UK level with the Green Alliance and companies that are at the cutting edge of packaging innovation.

I know that we will come on to this later, but I think that Scotland has a significant opportunity in that area. We have had 10 years of investment in recycling infrastructure. Over the past five years, there has been investment in our landfill diversion and energy recovery infrastructure. We have a big opportunity. We need to think about where we should go in the next five to 10 years and how we can make the case for reinvestment right here in Scotland. That will be determined by continuing innovation in this area.

The Convener: Does anyone else want to address that question?

Barry Turner (British Plastics Federation): From a packaging perspective, there has been considerable lightweighting over the past decade. In the next decade, there will be further changes in the way that we shop, which will influence what gets collected from households. The internet now plays a far bigger role in our shopping, and we will continue to see changes. The supermarkets have moved away from large-format stores to local stores. All of that will have some bearing on the sort of packaging waste that is generated.

Jim Brown (Binn Group): I would back up what my colleagues have said. The make-up of waste over the past 10 years or so has changed

dramatically. Barry Turner mentioned lightweighting, which has certainly had an effect, and people shop differently, which has changed things. We do not get as many newspapers in the recycling that we pick up now; it tends to be more lightweight materials. I think that that will continue to change.

Kate Forbes: Those conclusions must be based on data. How robust is the data that we currently have on Scotland's waste, and what are the priorities for improvement as we look ahead to the next decade?

Linda Ovens: Data has definitely improved and we are capturing more than we used to. There are plans within SEPA to automate and to make electronic data reporting systems consistent, and there is a huge piece of work going on around that. I fully support that and I think that it will be the key to ensuring that we have the right data. It is all about making sure that we are collecting smart data, not data for the sake of data. In the past, part of the problem was that, although we gathered lots of data, not knowing how to interpret it or what we should collect and why led to data overload and less consistency. I hope that the electronic systems will give us that consistency in future.

The Convener: Mr Turner, how does your experience of gathering data—and your experience of the robustness of that data—in Scotland compare with your experience in other parts of the UK?

Barry Turner: I have seen the data that has been generated by Zero Waste Scotland on plastics arising. The challenge for the sector in meeting future targets and maximising recycling is our ability to go down to what I would call a granular level. There was discussion in the earlier session about the number of people living in flats and what sort of waste they generate, and how that compares with households that have a kerbside scheme. It was quite interesting to see an article last week that forecast that in many cities the kitchen will disappear, and that people are eating so much food on the go and out of their premises that the home kitchen as we know it today will change dramatically in the next decade. We have to think about the impact that that will have. We also need to understand the different flows arising from that change, particularly from on-the-go consumption, which is an area that we need to understand far better than we do at the moment.

The Convener: How does Scotland compare with the rest of the UK? Is our data quite robust or do you have any concerns about it?

Barry Turner: I can only compare the Scottish data based on population. The Zero Waste Scotland report took down the plastics waste

arising. That could be looked at further, because by comparison with the UK as a whole, based on population, it is possible that that estimate is still on the high side. However, I come back to the point that I made earlier, which is that we probably need to take things to another level to help us in our journey.

Emma Harper (South Scotland) (SNP): I have a quick supplementary to Kate Forbes's question to Barry Turner. He mentioned that supermarkets are moving to smaller local outlets. What is the implication of that for waste? Will it be more or less? Will there be more packaging?

Barry Turner: It is Indicative of the way that we are living our lives, and are likely to live our lives in the future. That comes back to what I said about the role of on-the-go consumption versus consumption of food and drink in the home. If you have a meal delivered to your home or flat, it will come in different packaging from the meal that you would buy from a supermarket, for example. You need to consider the implications for shifts in types of packaging that will arise because of that.

12:00

Maurice Golden: What needs to happen to achieve the 2025 target to recycle 70 per cent of Scotland's waste?

Linda Ovens: There is a huge push on municipal and household waste, and I would like to see more done on the commercial and industrial sector's waste. We have about 6 million tonnes of household and commercial industrial waste, of which household waste is much less than half. The emphasis needs to shift away from what householders can do—they have done an awful lot already, with some authorities getting to recycling levels of nearly 60 per cent. The commercial and industrial sector is definitely playing catch-up, and that is where the biggest gains will come to get to 70 per cent.

Martin Grey: From a Pennon perspective. Viridor is one of the largest investors in recycling and energy recovery infrastructure in the UK and currently invests £500 million in Scotland. This opportunity is critical for us. Scotland is at the forefront of the circular economy space. We must recognise that this is not just an issue of environmental obligation; there is an economic opportunity if we to look at how to embed it into the heart of the Government's economic strategy and link resource use into a new industrial strategy. Scotland has done that really well, and it is recognised globally for it. As we travel across Europe, which I am fortunate to do, we see that the world is looking at the work that Scotland is doing in that space.

We heard this morning how we have come a huge way in a short time, from everything going in one bin, as it did when I was a boy, to where we are now. Seven or eight years ago when I entered the industry, the talk was about the fact that there was no real infrastructure in Scotland. That has come on in leaps and bounds in the past six or seven years, after 10 years of investment in advanced recycling infrastructure. The past four or five years have been about what we do with all the stuff that we cannot recycle, and the next five or 10 years will be about how to grasp the circular economy opportunities. I am genuinely optimistic about where we have got to.

A year and a half or two years ago, Viridor produced a paper with a set of policy asks for the Scottish Government, which I am pleased to say it has taken on board. The first of the paper's two main themes was the aggregation of materials, as 32 local authorities often collect material in different ways, which makes investment decisions difficult for an investor in infrastructure. We heard this morning about the household recycling commitment, which will make a huge difference over time. We also heard about the aggregation of materials through the brokerage service, which has the potential to add to the investment case. The second challenge is about recyclate quality. We have heard from SEPA and others about the MRF code of practice. That is a real opportunity to bring a fresh focus.

The point of recycling is not just to hit a target, but to create resources in the Scottish economy that will allow large manufacturers and remanufacturers to invest and create jobs in Scotland. That is absolutely what we are doing right. That does not mean that there are no challenges still to meet along the way, but many of the building blocks that will allow the next generation of investment to come to Scotland are in the process of being put in place.

Jim Brown: We fully support the waste hierarchy and Zero Waste Scotland's good work in putting all the regulation into place. Working for the Binn Group, I can say that we have a lot of interaction with colleagues from other companies across the rest of the UK, and they look in envy at the good work that is taking place up here.

However, I agree with Linda Ovens. There is a huge focus on household waste—and rightly so. After all, I have a vested interest as a householder myself, and I want the overall picture to improve, as it will continue to do. However, there has to be some focus on the commercial sector. Our business does not collect household waste, and there needs to be a lot more focus on the commercial and industrial sector and on how we can make things better there. We as a business put a lot of time and effort into promoting recycling

and best practice in that respect, but with regard to having a joined-up approach involving all vested interests and parties, we should be taking a closer look at how we improve the overall picture in Scotland.

Mark Ruskell: Hi. Can you give us some background on plastic? What types of plastics are being generated in Scotland? How are they being processed, and where are they actually going? You have mentioned lightweighting, but can you give us some detail about the nature of the market and how plastic is being sorted in Scotland?

Barry Turner: I will attempt to do that, but, as always, it is quite difficult to get down to a regional level.

With regard to total plastics generated, the figure for waste arisings, when compared with all types of waste, is quite low because of the lightweight nature of the products. Probably around 5 per cent of the figure for total waste generated in Scotland that was mentioned this morning is attributable to plastics, and that breaks down to roughly 60 per cent being packaging and 40 per cent being various other waste such as building and other industrial waste involving plastics.

The wide range of polymers that are in use has been selected for the materials' ability to do the job. As for what is collected to be recycled, various initiatives are in place across the different polymer streams, including industry-led initiatives that are focused on particular waste streams such as PVC, for example, as well as schemes that basically farm the plastics that come back through the household stream. Of those plastics, a number of polymers, including high-density polyethylene, low-density polyethylene and polyethylene terephthalate, are widely recycled, and there are strong markets for those materials.

Mark Ruskell: Where are the plastics going?

Barry Turner: In the UK as a whole, about 60 per cent of plastics are exported from these shores for further reprocessing. That situation will probably continue, although that will be influenced by what happens as a result of Brexit.

Martin Grey: The plastics that come to our facilities are collected at our materials recycling facility. Our nearest specialist polymer facility is at Skelmersdale, near Liverpool, where the plastics go to be pelletised. The pellets are then traded across either the UK or the globe, wherever there is a market.

That takes us back to what we are trying to achieve in Scotland with the circular economy. It is important to recognise that recycling plastics is an economic opportunity. We must ensure that there is more investment and infrastructure in Scotland

and that the manufacturing jobs that can flow from that are in Scotland. The way to achieve that is through aggregation. What prevents a plastics facility from coming to Scotland at the moment is the aggregated market across Scotland's 32 local authorities. If we pool those resources, as the Scottish Government's vision seeks to do, there will be a case for investing in a polymer facility in Scotland. If that were achieved, it would create the opportunity to consider what to do with the polymer when it was in Scotland and could be remanufactured here.

Mark Ruskell: Are any polymers difficult to recycle? Although films may be low in weight, they are difficult to recycle.

Returning to the point made by Iain Gulland on the first panel, plastics are still a high-value carbon resource. Do particular plastics remain problematic to recover and to reprocess?

Barry Turner: If I was to generalise, the challenge is more about what we do with those plastics once they are recycled. Unfortunately, we started the plastics recycling journey by trying to do what is most difficult—to recycle a lot of them back into food contact materials. It will always be technically challenging to do that, because we have to ensure that those materials are safe to be used in that way.

That recycling journey should always be pursued if you can make it, but you should never ignore the other opportunities. We are seeing great opportunities for a number of polymers that were traditionally seen as more difficult to recycle to be used in a variety of applications. Those wideranging applications include everything from flood defence to railway sleepers. Furthermore, the traditional focus has always been on mechanical recycling but, in the future, we will see other forms of recycling that will open up opportunities to recycle the more difficult plastic structures.

Martin Grey: I will pick out another point in order to give further grounds for optimism. In recent months, we have seen a strong focus by the media on black packaging and black food trays, which are largely unrecyclable. The industry is moving apace in response to consumer demand to provide something different, with companies such as Marks & Spencer and the Co-op moving fast on detectable black plastics and looking at opportunities in the UK to make investments with partners. That is hugely encouraging and, in the coming months, we will see big progress in that area

Mark Ruskell: Are there any other views?

Linda Ovens: The situation might have changed but, until recently, agricultural film and baling material were problematic. They could not

be recycled back into use for agricultural bales because of the quality of the material.

12:15

Jim Brown: There are problematic plastics. Most, if not all, of the plastic waste that is generated in Scotland leaves Scotland.

Some good things are happening on the circular economy. We are involved in a project with Zero Waste Scotland that is called project beacon, which we hope will be a success. It aims to recycle plastics mechanically, sorting all the different plastics into their plastic types, recycling them chemically and turning them into fuel and naphtha, for example. Along with some other parties and with Zero Waste Scotland, we have recently been granted funding to advance that project. We are confident that what we are doing will improve the picture and help to deliver the circular economy.

Mark Ruskell: What are the greatest opportunities to minimise the amount of packaging that we generate? I am talking not just about recycling but waste minimisation. Lightweighting has been mentioned. Where does producer responsibility fit into that?

Barry Turner: A lot of change will come about in the sort of packaging that will be used in the future. It will be dependent on our ability to recycle those products further in the future.

Laminated pouches have come on to the market and present unique problems for recycling, but the industry is now considering those problems to see whether we can get a win-win situation, because the pouch can take away roughly 80 per cent of the weight of material in a rigid container. The challenge is what we do with it at the end of its life.

The industry has established a working group at the European level to determine how we can reengineer the structures so that we can maintain the barrier properties that we need in the material and not compromise the packaging. That will enable us to continue developments and provide further opportunities to reduce the weight of the packaging that is placed on the market. I think that there will be more movement on that in the future.

Over and above that, we have an initiative called the plastics industry recycling action plan—PIRAP—which brings the waste management industry, the retailers and the brands together with our industry and the recyclers to consider how we can change designs to make things easier to recycle. That might involve removing a sleeve from a bottle and replacing it with a label or ensuring that the materials that are used in a particular packaging design are compatible so that they do not present problems when they get into

the waste chain. We are doing a lot of work on that as well.

Mark Ruskell: Does that have widespread industry buy-in? Are the manufacturers of Pringles and other companies that use problematic packaging resisting that or are they on board as well? Are you working together to address and minimise the problem?

Barry Turner: The packaging suppliers are only part of the chain. If the brand or the retailer wants to go in a particular direction with the design, we cannot tell them that we will not supply that packaging. Having said that, with the focus on the circular economy package in Europe, most brands and retailers will be forced to consider the design of the packaging that they use in the future and will have to make changes. Whether that comes from consumer pressure or just from best practice in sustainability, the situation will change more rapidly in the future than it does now.

Mark Ruskell: Are there any other comments on packaging?

Jim Brown: The key is sustainable procurement, which Barry Turner just touched on. Taking it back to a local level, in some of the clients that we dealt with in the past in the food and drinks industry, the design people were pretty much disengaged from the procurement people. There was not a joined-up chain within one company.

I think that we have progressed an awful lot on that front. Companies now sit together and look at how they can design out non-recyclable materials from their packaging. Some businesses still need to come on board with that approach, but the profile of that element of packaging is much higher than it was before.

The Convener: Can I take you back to the subject of plastics? To get it on the record, can you give us a feel for where the contribution of plastic drinks bottles sits in the whole plastics scenario? What is your best guess on what the impact of a deposit return scheme would be on rates of recapture and recirculation?

Barry Turner: The plastic bottles that are likely to be affected by a DRS, if one was introduced, make up probably 5 per cent of all plastic waste arising. You have to see that in the context of total waste arising as well. A DRS would make a very small impact on the achievement of Scotland's overall targets. The performance of the DRS would have to improve on the current level of recycling that is being achieved, otherwise you would have invested in infrastructure at an additional cost for no extra gain.

The Convener: What is the experience elsewhere in Europe? Was there an upsurge in

the amount of that type of plastic coming back into circulation because of a DRS, or was it negligible?

Barry Turner: Looking at the plastic bottle—what gets collected and the type that would be affected by a DRS—we are probably achieving a collection rate of 60 per cent in the UK as a whole, although parts of the UK achieve above that rate. Wales, for example, is currently achieving a collection rate of about 75 per cent.

DRS schemes, many of which were introduced in the 1970s and 1980s—packaging mix has changed a lot since then—vary in performance rates from anything in the 50s right through the 90s. The question is where you think we would be in that spectrum.

The Convener: It is useful to get that on the record.

Richard Lyle: Glasgow City Council talked earlier about recycling rates and the fact it is 29th out of 32 councils at 25 per cent, whereas Angus Council is at 60 per cent. Do you agree that, because of the make-up of housing in Glasgow—it has a lot of flats and tower blocks—the council needs to drill down and get people in those houses involved in order to improve its recycling rate?

Barry Turner: I will pass that question to Martin Grey for comment. There are unique challenges for people who live in flats—particularly flats that were designed many years ago, which have no infrastructure built into them to allow the residents to recycle the streams of materials that we want to recycle. There are unique challenges in that situation, and we require a tailor-made solution for that sector of the population.

Martin Grey: I might broaden that out to where we are in Scotland as a whole with public attitudes to recycling. We have done quite a lot of work in that space. We produce an annual Viridor recycling index, which looks at public attitudes right across the UK, and there are four key facts that I will leave you with.

Eight people in 10 see recycling as a valuable resource, but 60 per cent of people are not confident that they know what can be recycled. I have been in the industry for seven or eight years, and quite often I will pick up a material type and not know what should happen to it. Given that that is my experience, I understand the public confusion about that. One element that was picked up by the previous panel was the lack of consistency, and, in Scotland, 76 per cent of people say that they are extremely frustrated that recycling collections vary across the country. Such things add to the problem of low participation.

Interestingly, however, 79 per cent of people say that they would recycle more if they could see

the economic benefit of that going back into public services. The more a material is contaminated, the higher is the cost to councils of recycling it. If people could see that, as a result of their actions, money was being saved and reinvested in local public services, that would encourage more recycling.

As lain Gulland said earlier, communication is central to this. I do not think that we have done enough to sell the message, although excellent work is going on across the country. Communication is a fundamental element, because we have got to take the public with us. We still have a long way to go to achieve that.

The Convener: Have you published your survey?

Martin Grey: Yes. I will leave a copy with the committee.

The Convener: Thank you.

Richard Lyle: Polystyrene makes up quite a lot of packaging. I hate it to bits because it breaks and blows all over the place and I do not know where to put it. Is it recyclable?

Barry Turner: Polystyrene can be recycled. Having said that, we have to be careful that we do not lose some of the advantages that come with that material. Although I understand your frustration, polystyrene offers fairly unique protection in terms of absorption and insulation. It plays a role. It can be recycled, but it is particularly lightweight and it can be a challenge to get enough volume back to make recycling it worthwhile. That is why it is not currently collected.

Finlay Carson: I have three questions about treatment infrastructure. I will ask them all together and I hope that you will address all the points. I will compact them to take out some of the wastage.

Members: Oh!

Finlay Carson: That was a poor attempt. [Laughter.]

We have heard quite a lot of enthusiasm about how we are moving forward, but are you confident that the optimum waste infrastructure is being developed in Scotland? I am thinking about, for example, the type, location and capacity of facilities. Are there any sectors or materials for which Scotland is particularly well placed to develop further infrastructure? What would be the effect on the amount of waste that Scotland imports and exports?

Martin Grey: On what we have done well, I will leave an example with you. In 2013, as we heard earlier, the Scottish Government had a vision that it wanted to boost sustainability in our number 1 export, which is Scotch whisky. As a result, it decided that it wanted to develop further

processing capacity in that area. Because of that policy direction from the Scottish Government, Viridor invested £25 million in what is genuinely one of Europe's most advanced glass recycling facilities, at Newhouse. That not only boosts the sustainability of recycling in Scotland but helps the Scotch whisky industry and is a real economic driver for investment in the area.

That example links to SEPA's point, in that it was developed on a former waste crime site that was closed by SEPA and other partners. It is a really good example of how things can work when we try to fit all those pieces together.

12:30

My view is very firmly that the opportunities are in the area of plastics. That is where we are starting to see the most rapid innovation across the UK and Europe. Plastic is a part of our lives. I will give two examples. We talked very briefly about black plastics and the pace at which that is moving. Also, think back to eight months ago and the public outcry on the back of Hugh Fearnley-Whittingstall's BBC series "Hugh's War on Waste" at the fact that many coffee cups were not recyclable, and the rapid pace of change from the coffee companies in response. For me, that is where committees such as this one and its work have real potential to drive the investment case. Plastics are where we are probably going to make the most progress in Scotland.

Barry Turner: We are always keen to look at pilots. If we take polystyrene as an example, we are currently working together with the Welsh Government to trial how we can overcome the barrier to economic recycling that I referred to earlier. We constantly need to look at opportunities to do things differently in response to the unique challenges that we have. Whether that is by ensuring consistency so that we can bring enough volume together to contract with so that a plastic facility will be built in Scotland, or whether it is by looking at how we can overcome the unique challenges of recycling for people who live in flats, we need to be moving into those areas if we are going to make real progress in the future and make a difference.

Linda Ovens: Have we got the optimum infrastructure? Is that coming? At the moment I do not think so. It makes me really sad that we lost our paper mills, glass plants and steel mills, which could have contributed so much to what we now need in the way of new infrastructure and the requirements for generating the circular economy. We should do more on what I would term intermediate facilities, such as those that were mentioned in Glasgow City Council—the smart materials recovery facilities that can take multiple materials and improve their quality so that they

can enter the market and have a value and be traded as commodities in their own right.

It is great that there are some single-stream facilities, but to make a difference in the low-recycling councils such as Glasgow it is entirely appropriate to have those materials recovery facilities. Generally, as householders and as a nation, we struggle with recognition of material types in our bins. Recognition is best where the item is identifiable—for example, it is a plastic bottle; it does not come under a generic name that nobody understands. If we are going to continue to ask people to recycle things when they do not quite understand what they are, we need facilities that take those ambiguous items, sort them and improve their quality for the market.

Jim Brown: Am I confident that the waste infrastructure is right in Scotland? No, I am not. Lots of good work has taken place—I feel as though I am repeating myself because I have said that already, but it genuinely is the case. However, there is much more that we can do. I mentioned project beacon—the project that we have on the go with Zero Waste Scotland just now—and I would be happy to share the details of that with the committee. That is one example of how things can be made better in Scotland.

I come back to the point that the energy recovery capacity that we have inbuilt in Scotland in Viridor—the plants in Dunbar and Glasgow and the two others that were referred to earlier—is almost completely taken up by local authority waste tonnage, which leaves a huge void for residual non-recyclable waste.

I heard what lain Gulland said earlier; he disagreed with Robin Baird. I share Robin Baird's view. I think that, come 2021, we will have to pay a high price—I will not say that we will have a gun held to our heads-to export the materials that Mr Carson asked about. We export because we have no alternative. We would love to have an alternative, but we do not have one. We export RDF and SRF-refuse-derived fuel and solid recovered fuel-to Europe. We have already had an increase in cost as a result of what happened to the pound following the Brexit vote, and we are concerned about what will happen in 2021, given that we have no infrastructure in place. We ought to be working on the issue now, because it is hugely important.

We need to build capacity in Scotland. There are various different types of facility. There are lots of good examples of combined heat and energy plants in mainland Europe. There might be some overcapacity, but there are many good examples that we can learn from. We can learn from others' mistakes; we would not be building a prototype. We need to look at that today, not tomorrow.

Barry Turner: I have another example of a project to mention. Agricultural waste has been touched on. As I am sure the committee is aware, there is a recycling plant for agricultural plastics in Scotland. The main challenge that that plant has faced has been one of collection.

That comes back to what I said earlier about the infrastructure. If we can collect the necessary volume of material, the technical solutions will follow to enable us to recycle it, but the first step—making sure that we have the infrastructure in place that optimises the collection of material—is critical.

Claudia Beamish: I seek the panel's views on compliance and enforcement issues. I would like to get some specific detail on compliance with the requirements for businesses to present key recyclables—metal, plastic, glass, paper and card—separately for collection. If you have the relevant knowledge, I would also like to find out about the compliance of food businesses with the requirement to present food waste separately, as per the Waste (Scotland) Regulations 2012.

I am conscious of time, so I will ask all my questions at the same time. Have SEPA's new integrated authorisation framework and enforcement tools improved compliance? I am sorry for asking a range of questions all at once.

The Convener: If you have specific knowledge of a specific aspect of the issues that Claudia Beamish has raised, please just focus on that. It seems that Linda Ovens wants to go first again.

Linda Ovens: Yes, I will take that head on. There was a lot in that.

I want there to be more business recycling. There are things that businesses are supposed to be doing. I recognise the good work that SEPA is doing with the fixed-penalty notices, but it is the tip of the iceberg. Within the resources that it has, SEPA is doing what it can, but it is working a business at a time, and a huge number of businesses are not complying. Some businesses are not even aware that they are required to comply.

Mention has been made of the smoking ban and the single-use carrier bag charge, which came in overnight. Everyone was aware of those measures and everyone enforced them. Supermarkets said, "No, you can't have a bag—you need to pay 5p," and pub owners said, "You can't smoke in here." Every member of the public enforced those measures—they were self-regulated. That is definitely not the case when it comes to businesses' awareness and understanding of the recycling requirements. There is a huge communication message for all of us to convey. If we all got behind that, we would see a huge

increase in business uptake and participation in the regulations.

On integrated authorisation, I have not seen too much change at the moment, but that is still going through the implementation process and the consultation on some of that has just finished. I welcome those efforts to promote streamlining and consistent messaging across all enforcement.

Jim Brown: I would like to comment on the overall compliance rates from our own business perspective. You mentioned card, paper, plastics and glass. On the whole, tackling contamination is an on-going challenge for us as a business. We have to educate our drivers, who are the guys at the coalface who are collecting those waste streams, and we encounter on-going issues with contamination, but we communicate with our customers to try to improve that picture. Things are getting better because we are continually communicating with them.

That brings me back to the message that what we really need are focused public education campaigns. I know that there have been lots of national initiatives such as the love food, hate waste campaign, which has been positive, but there are 32 local authorities doing 28 different things to put the message out there. There needs to be a more combined and coherent campaign, as there was with the smoking ban, to get a single message out about what we are trying to achieve.

David Stewart: You will have heard my question to the previous panel. What assessment have you all made of the possible effects of Brexit? Have you set up contingency plans to consider the effect that Brexit might have on your industry?

Martin Grey: The industry as a whole has done a huge amount of work on Brexit. We have looked carefully at the risks and also at the opportunities. I draw members' attention to a report by Policy Exchange called "Going Round in Circles: Developing a new approach to waste policy following Brexit", which I commend to the committee. It looks at some of the opportunities for maintaining a focus on the environmental outcomes that we are trying to achieve. From the point of view of businesses and investors, what Scotland does very well is that it has an ambitious policy agenda, matched by realism about how we can get there, as well as long-term policy support and a regulatory framework that combine to give investors confidence. That whole raft of packages-the household recycling charter in particular-is what will make the difference and will continue to make Scotland an attractive place to invest. What is also particularly important in Scotland is the fact that there is cross-party support for what we are trying to achieve, and that it is not just an environmental obligation but an economic opportunity. If Scotland keeps to that remit and that strong policy agenda, that will continue to make Scotland an attractive place to invest.

Barry Turner: We as an industry have looked at the situation with Brexit, including how it might impinge on skills. There is some uncertainty about our ability to secure labour in the future, so we are taking steps to ensure that we can compensate for any risks in that area.

12:45

Economic growth risks are the biggest uncertainty for our industry, because of uncertainty about exchange rates and tariffs, which depend on what exit is finally negotiated. It is difficult to offset those risks, as there is probably an inevitable cost inflation as a result of the risks that will affect a lot of sectors.

Our view as an industry that exports, in common with many industries, is that the EU is an important export market, so legislation as it affects our industry will probably still be framed, by and large, in the EU. It will be tweaked when it comes into the UK, but we will take a continuing lead from Europe because we will wish to continue to export.

Linda Ovens: I am generally relaxed about Brexit and what leaving the EU might mean for materials trading, given that the majority of the materials that we trade are globally traded anyway, so there is not a huge link to Europe. The majority of global trade is linked through Organisation for Economic Co-operation and Development countries and the Basel convention, so I would expect that to continue, whatever happens.

On legislation and regulation, I have been called on a number of times by global companies to teach them about European law and regulations, given that they are recognised as the strictest in the world. I do not envisage that we would move away from that approach; not being in the EU does not mean that Scotland cannot follow best practice.

Refuse-derived fuel is probably the only thing that I have concerns about. Export of RDF is a market that is already diminishing; the capacity in other EU countries is growing, as everyone has an EU 50 per cent recycling target to meet, so eastern Europe is asking for the capacity in the same way as we are. I can see trans-frontier shipment requirements getting tighter and the economics changing—not just on gate fees for facilities, but on emissions, shipping and haulage costs and border control—when getting that trade to Europe. That would be my risk area. We talked earlier about the lack of capacity in Scotland at the moment to mitigate that risk.

Jim Brown: It remains to be seen what impact Brexit will have, although we have some concerns that have been alluded to earlier. Exporting materials, whether they be RDF, SRF or recyclates going predominantly to mainland Europe, would be certainly be my concern for our industry.

I agree with lain Gulland that we will continue to share ideas and learn from one another on legislation, regulation and good practice. I mentioned earlier that a lot of people in Europe look to Scotland and the good work on the circular economy and suchlike, and those relationships will continue. I have no doubt that there will be challenges, such as the concerns about labour that Barry Turner mentioned and also exporting.

David Stewart: I am very conscious of the time, convener, but, finally, do any of the panel members have any concerns about the enforcement of European directives in future if we are not going to be in Europe? After all, it looks as if we are going to withdraw from the European Court of Justice, which is the guardian Europewide of all things European to do with the environment. Has that issue appeared in any of your contingency planning, or does your industry not see it as central?

Martin Grey: I have nothing to add to my earlier answers.

The Convener: Thank you very much for your time and your evidence, which has contributed to the sum of knowledge on this subject. If you want to follow up on anything, please feel free to write to the committee.

Subordinate Legislation

Environmental Impact Assessment (Miscellaneous Amendments) (Scotland) Regulations 2017 (SSI 2017/168)

12:50

The Convener: Item 3 is consideration of a negative instrument. If members have no comments, does the committee agree that it wishes to make no recommendation in relation to the instrument?

Members indicated agreement.

The Convener: At its next meeting on 27 June, the committee will take evidence from the Cabinet Secretary for Environment, Climate Change and Land Reform on the Wild Animals in Travelling Circuses (Scotland) Bill and will seek a general update on her wider portfolio. As agreed earlier, we now move into private session.

12:51

Meeting continued in private until 12:55.

This is the final edition of the Official R	Report of this meeting. It is part of the and has been sent for legal dep	e Scottish Parliament <i>Official Report</i> archive posit.
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