



Northern Ireland
Assembly

Committee for Agriculture, Environment and
Rural Affairs

OFFICIAL REPORT (Hansard)

Waste Management: Department of
Agriculture, Environment and Rural Affairs
and Strategic Investment Board

19 January 2017

NORTHERN IRELAND ASSEMBLY

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Members present for all or part of the proceedings:

Mr Sydney Anderson
Mr Maurice Bradley
Mr David Ford
Mr William Irwin
Mr Patsy McGlone
Mr Harold McKee
Mr Edwin Poots
Mr Robin Swann

Witnesses:

Mr Owen Lyttle	Department of Agriculture, Environment and Rural Affairs
Mr John Mills	Department of Agriculture, Environment and Rural Affairs
Ms Oonagh Warke	Department of Agriculture, Environment and Rural Affairs
Mr Alan McVicker	Strategic Investment Board

The Acting Chairperson (Mr Ford): I welcome the delegation bringing us oral evidence: John Mills from the environmental policy division of the Department; Owen Lyttle from water recycling and EU funding branch; Oonagh Warke from waste infrastructure; and Alan McVicker from the Strategic Investment Board (SIB). I ask you, lady and gentlemen, to take 10 minutes or so for your presentation, and we will then have time for the q-and-a session with members. Over to you.

Mr John Mills (Department of Agriculture, Environment and Rural Affairs): Thank you, Chair. I am happy to present on waste infrastructure. I hope that everyone was able to get the presentation that we sent out. Thanks to the Clerk, and apologies for any lateness with that. I will briefly set out some of the background before handing over to Owen, who will talk specifically about recycling. I will then hand over to Alan from SIB, who will cover energy from waste.

The first slide gives the policy context. Northern Ireland legislation and policy exists within the overall EU framework, mainly set through the waste framework and landfill directives. These are transposed into local law via legislation such as the Waste and Contaminated Land (Northern Ireland) Order 1997 and various sets of transposing regulations. Supporting this legal framework is the waste strategy for Northern Ireland, which is the purple document pictured on the slide. The ongoing importance of the waste area is illustrated by the inclusion of recycling as an indicator in the draft Programme for Government.

The next slide shows the waste hierarchy, which is at the centre of the waste strategy. The waste hierarchy shows a sort of order of desirability for how we deal with waste, with prevention at the top and disposal — landfill basically — at the bottom as the least desirable approach. Of course, even this is far preferable to illegal disposal of waste. The policy in recent years has been based on trying to move waste up the waste hierarchy. However, we cannot prevent, reuse or recycle all our waste, and we need to use all segments of the hierarchy to deal with the waste that Northern Ireland produces.

The next slide shows a pie chart and is to remind the Committee what the waste is that we are talking about. Northern Ireland produces about 6 million tons of waste annually, with the majority of that being construction and demolition waste. That is the green part of the circle on the chart. However, the part that we are concentrating on is the purple part, which represents municipal waste, mainly from households, which makes up about one fifth of the total waste at about a million tons per annum. This area is where the majority of the EU policy drivers lie and where most difference can be made. For example, the last estimate reckoned that construction and demolition waste recycling was about 80% and that household waste is about half that. The next slide shows what happens to the million tons of municipal waste. Roughly 40%, shown by the green sector, is recycled; 40%, shown by the red sector, goes to landfill; and the remainder is exported for energy recovery.

How we deal with waste has been a policy success over the last decade, with falls in landfill and increases in recycling, but there are significant challenges, which are set out in the next slide. After a period of overall reduction, the total amount of waste is increasing. Against this, landfill capacity is finite, recycling has reached a plateau, increased export of refuse-derived fuel is a risk for various cost and capacity reasons, and there have been large finds of illegal waste.

The next slide deals with an issue that the Committee had specifically asked about: the impact of circular economy proposals. These are currently being debated in the European Council. At the heart of them, they would see a marked increase in recycling and landfill targets by 2030. The circle on the left shows what happens to municipal waste at the moment, and the circle on the right shows what the 2030 target would be. There would be a large increase in recycling and a large reduction in landfill.

The next slide returns to the waste hierarchy. As I said, Owen and Alan will run through the main sectors. I will mention the top layer, which is prevention. The best thing to do with waste is not create it in the first place, of course, and there are a number of illustrations of this approach. The best known is probably the carrier-bag levy, which is credited with saving several million plastic bags per annum. In addition, in response to EU waste and packaging and other product-specific directives, producer-responsibility schemes have encouraged manufacturers to use less packaging and make their products more resource-efficient. Of course, prevention does not require physical infrastructure, so it is not the focus of what we are going to talk about. I will hand over to Owen, who will talk about recycling and reuse.

Mr Owen Lyttle (Department of Agriculture, Environment and Rural Affairs): Good morning. I will pause on the waste hierarchy for a minute. I will provide an overview of preparing for reuse, recycling and some elements of recovery activities and all these activities that count presently towards the national recycling rate.

As waste moves up the hierarchy, the emphasis on the type of infrastructure and capital investment changes. In addition to infrastructure, there is a greater need for communications, training, innovation and opportunities to exploit markets. For example, earlier this year, the Department provided Ulster Supported Employment and Learning Ltd (USEL), a social enterprise and the largest supporter of people with disabilities and health-related conditions into the open market in Northern Ireland, with a grant for a circular economy pilot project to improve the reuse, recycling and recovery of mattress components. These small investments in capital assets have improved recycling and reuse rates for mattress components and reduced the cost of treatment per unit mattress, but, more importantly, the pilot has established that, for recycling to increase, leading with a circular economy business model is essential to open doors for business to be more competitive, produce higher-value products, in this case new mattresses, and increase employment. This mattress recycling section now employs eight or nine staff and is seeking to increase capacity by over 250% in the short term. Granted, the unit mattress recycling cost is currently comparable to other forms of treatment and disposal, but the £1 spent on recycling at USEL is creating jobs, skills and wealth in Northern Ireland as opposed to it disappearing to the Chancellor's landfill tax. That £1 is working better for Northern Ireland. USEL is now actively seeking to create new products from the components that are currently being sold onto the market for further reprocessing. It is looking to maximise the value further by converting those components into new products, with more jobs to follow.

I will now turn to the next slide on recycling. Infrastructure in recycling is more complex than a linear formula of working out tonnage available and then calculating treatment needed. A range of infrastructure is required, as this slide portrays. Depending on current contracts and kerbside collection systems, the inference on different types of infrastructure required is variable. Fundamentally, reaching a recycling target should not be considered the end in itself. We need to be looking to add value to waste to create a commodity where, if we cannot use it in Northern Ireland for manufacturing, it attracts a higher commodity price in the global market.

We must stop seeing waste as a problem and embrace economic opportunities. Effectively, this is about adopting a circular economy approach. I will briefly explain that concept. A circular economy is an alternative to a traditional linear economy — that is, make, use, dispose — in which we keep resources in use for as long as possible, extract the maximum value, and then recover and regenerate products and materials at the end of the service life. In doing so, it will support a number of outcomes across the current draft Programme for Government, not just living and working sustainably and protecting the environment, but assisting in the core purpose of driving economic growth. For instance, consider three current Northern Ireland businesses that, between them, employ over 700 manufacturing staff in the south and south-west of Northern Ireland, and which convert recycle to high-value products to be shipped internationally. Northern Ireland is unable currently to produce the quantities of quality recycle that are needed for those businesses to use. If we could, not only would it make those businesses more competitive, efficient and able to maintain current employment, but it would provide potential opportunities for expansion of the business with further jobs to follow. Quality, as well as quantity, is an important factor. The Department is currently working with local councils, through the support of the waste and resources action programme (WRAP), to consider different kerbside and household waste recycling centre scenarios that look at improving quality, value for money and cost, and increased recycling.

I will now turn to the next slide. Capital investment in infrastructure alone will not deliver the change required to increase recycling. Adequate funding of communications, transition arrangements and investment in developing products made from recycling is required to optimise infrastructure needs. First, a well-resourced communications plan is required. WRAP studies indicate that to introduce a new service would cost up to £2 per household or up to £1 per household for ongoing services. This will vary, depending on local circumstances. Sadly, communications budgets tend to be the first cut, and whole-service net costs and savings are rarely considered. Investment in skills to optimise recycling systems as simple as training of operators at household waste recycling centres is also required. Support is also required for businesses to develop new products in line with what I have already explained for USEL's vision to create the pool for recyclates in the local economy.

Finally in my section, the graph in the next slide demonstrates a key point of note. For the first time for Northern Ireland, in 2015-16, the household waste recycling rate was greater than the landfill rate. Let us not underestimate the progress that has been made by local councils and householders in embracing recycling. In 2002, approximately 90,000 tons of household waste recycling was collected. In 2015-16, this had increased to nearly 350,000 tons — a nearly 390% increase. Let us think about the savings that have been made by councils, the jobs created in the local economy, and the value of those recyclates being converted to products and used in manufacturing etc. There is no room for complacency, however. As has been mentioned, recycling rates have plateaued slightly. The next major advancement in recycling rates will require us to work recycle and waste for the Northern Ireland economy by looking at its value as well as its role in assisting to protect the environment.

Mr Alan McVicker (Strategic Investment Board): Thank you, Owen. I will touch briefly on energy from waste and landfill. As has been mentioned, even with significant efforts to prevent, reuse and recycle waste, there remains an element of residual waste — essentially, the waste that goes into our black bins. The well tried-and-tested method of dealing with residual waste is to use energy-from-waste (EFW) facilities to recover the energy and value contained in the waste. At present, there are over 400 energy-from-waste plants across Europe and between 40 and 50 in Great Britain, so it is well tried-and-tested technology. There is one energy-from-waste plant that deals with municipal waste currently in the Republic of Ireland: the Indaver EFW plant in County Meath. Another plant is due to open later this year in Dublin; it is a very significant plant that is operated by a company called Covanta. It will deal with up to 500,000 tons per annum of municipal waste.

The next slide asks this question: does Northern Ireland have a residual waste infrastructure gap? We believe that the answer is yes. I go back to the cessation of the Southern Waste Management Partnership (SWaMP) procurement in 2012. At that stage, the then Department of the Environment carried out a stocktake of the residual waste infrastructure programme to ensure that the direction of

travel was still appropriate to achieve the landfill directive target for 2020. At that stage, the Department asked SIB to undertake a detailed analysis to identify what the scale of the infrastructure gap, if there was one, was for residual waste. We undertook that study. Back in 2012, we worked out that additional infrastructure for residual waste of up to 142,000 tons per annum was required. We undertook that study again in 2015 because, in the time between 2012 and 2015, the very serious issue of waste crime came to light. I know that many Committee members have been up to the Mobuoy Road site. A very significant tonnage of waste — potentially in excess of one million tons — was discovered up there in an illegal landfill site. Those tonnages had not been factored into the original 2012 study, so the update in 2015 was to factor in the illegal tonnage that had been identified. That increased the residual waste infrastructure gap to between 250,000 and 350,000 tons.

Owen mentioned the circular economy package. When we take a look further down the road — out to, say, 2030 — and factor in the more stringent targets that the likes of a circular economy package would introduce, that would increase the need for residual waste infrastructure in Northern Ireland to somewhere between 500,000 and 600,000 tons to meet those targets.

The graph shows what we are doing in terms of energy recovery. From a zero start in 2008-09, we are now exporting about 18% — about 170,000 tons — a year of material in the form of refuse-derived fuel. The slide shows the bales being loaded onto the barge. That is a sustainable and renewable form of energy that is being shipped away from these shores to be put into energy-from-waste plants across different facilities in Europe. We are losing that benefit.

I will move on to the next slide. At the bottom of the waste hierarchy, we still have some requirement for landfill. I think that it was mentioned earlier that we are still landfilling close to 40% of our residual waste in this country. So, there is still a requirement, and there will be for some years to come. Landfills are reaching the end of their life, and some thinking will need to be done about developing new facilities. Sometimes landfill is viewed as the low-tech end of the process of dealing with waste, but, as the slide demonstrates, there are significant costs associated with developing, running and closing landfill sites. You can see the cost of developing new cells. It is very significant. There are the filling operations and the netting systems to keep vermin and wind-blown litter at bay. We have to deal with issues like leachate treatment and methane gas, which is generated as the waste starts to break down biologically. Then, at the end of the landfilling operations, we have to cap the site and put a provision in place to look after landfills, potentially for many decades, after the site has closed. Landfill still has a part to play in the overall process, but it does not generate great value from the waste that is, essentially, put into the ground. That is why it is at the bottom of the waste hierarchy. It is not a cheap option either, because, before you even put the disposal price onto it, landfill tax is sitting around the mid-80s, in terms of costs.

The last slide is a round-up of what has gone before in terms of the waste hierarchy and the work that is ongoing on how we deal with our waste. A very collective approach has been taken over the last year between central and local government to develop a waste action plan, to move us forward in a 2020/2030 time horizon. That action plan has developed six key outcomes, which are included on the slide. There are four delivery actions and two supporting actions. The four delivery actions very closely align themselves to what has been discussed here: waste minimisation is the best option; achieving recycling rates and potentially more ambitious recycling rates in future; getting better use out of the residual waste in the form of energy recovery for Northern Ireland; and ensuring that we have sufficient landfill, as much as we need to take us forward. The final two bullet points are to look at a delivery model that is appropriate to take all this forward and to create a procurement strategy to develop the outcomes. The action plan has been approved and signed off by the 11 new councils. It is currently under consideration by the AERA Minister. I understand that the Minister has asked the Committee for feedback on the action plan.

That concludes our presentation.

The Acting Chairperson (Mr Ford): Thank you very much. I will start with a couple of questions.

You have referred, and we have heard it previously, to the plateau in recycling rates at the moment in Northern Ireland. How much variation is there between different councils in their recycling rates, at this stage? Are there issues that might be addressed simply by bringing the slower councils up to the pace of those that have been doing it better for some years?

Mr Mills: We had figures only for the old councils. I think, Owen, I am right in saying that, just in December, we received the first figures for the 11 councils. Do you want to go into that in more detail?

Mr O Lyttle: It depends on the baseline for the different councils and what services they provided. For instance, in the north-west, they more recently introduced organic waste collections, whereas other councils in Northern Ireland had those rolled out before. There is a certain lag that they have to catch up on. The work that we are currently conducting with local councils and WRAP is to look at scenarios, taking in all the councils across Northern Ireland, to see how we can optimise recycling services in each council area and by how much those councils could realistically increase rates before 2021, the key date for the EU recycling target. For instance, Derry City and Strabane District Council has one of the lower rates. There is an expectation that it should have a significant increase to the mid-40s, while councils that are currently sitting at the mid-40s could go beyond 50%. The balance then for Northern Ireland, by the time we get to that crucial date, would be 50% overall.

The issue is that very rarely do you get an immediate uplift when you introduce a service. It takes two or three years to optimise it. As I said, it is not just about a technical solution for a service. If it is not backed by a good communications and awareness campaign for householders, you will not optimise that service. In some cases, it can actually work against you.

There is work going on to look at each council, and the goal is to make sure that, across the whole Northern Ireland piece, we push through the 50% mark.

The Acting Chairperson (Mr Ford): Referring to the residual problem and the need for energy from waste, you gave figures that are somewhat scaring. The 2012 estimate of 140,000 tons has now increased to potentially 500,000 tons. Why has there been such a variation in such a relatively short time? What kind of waste are we talking about that has produced such an increase? It is effectively a trebling or more of what might be required for EFW.

Mr McVicker: We carried out the first review back in 2012. It was a very detailed analysis. It looked at all sorts of moving parts, such as the baseline of the council tonnage produced, the recycling rates and the merchant capacity available. There were a lot of factors involved. That is where the figure of 142,000 tons came from. That is black bin waste, essentially. What changed was the discovery in 2013 of a very significant element of waste that had been illegally landfilled. Obviously, that was not being reported because it was illegal, and it then had to be factored in. That gave us our first step up to the 250,000 to 350,000 tons.

The 500,000 tons that I referred to is us looking further down the line at the circular economy package, which would introduce much more stringent targets. It would put a cap of 10% on what can go to landfill. We are currently landfilling about 40%, so a significant amount of material that is currently being landfilled would have to go to another home. Part of it would go through the additional recycling initiatives that Owen referred to earlier. Some would have to go through energy from waste as per other parts of Europe.

The other point to mention is that, in addition to identifying the illegal waste, in 2012, we were just starting to come out of a very deep recession. There was some talk that waste might decouple from economic growth. Unfortunately, it is not decoupled, and, as we came out of the recession and people started to get a bit more confidence and consume again, waste volumes started to grow. It has been relatively small, but waste volumes are on the rise again. That is another reason why the total is going up.

The Acting Chairperson (Mr Ford): The suggestion that a relatively small proportion through the circular economy changes will be recycled as opposed to what will end up going into energy from waste is slightly worrying.

My understanding is that there is currently planning approval but that development has not yet happened for Bombardier to do the EFW plant. How much is any plan to expand EFW dependent on the current Arc21 proposal and/or Bombardier? Is there anything else currently in the pipeline? I should probably declare my interest as an MLA for South Antrim when we are referring to Arc21.

Mr McVicker: The view of the panel at this end is that we require both the Bombardier facility and the Arc21 facility because of the point you raised about those tonnages potentially increasing.

I will pick up your first point in relation to the circular economy. At the moment, the recycling rate is sitting at about 42%, and a significant effort will be taken to get to 50%. The circular economy target for recycling municipal waste is 65%. That is more than a 20% increase in recycling. Yes, it would

require further material to go through EFW, but it will also require very significant effort in relation to recycling. The two work in tandem. It is the tonnage that is coming out of landfill that is the big movement.

On your second point, my view is that we require both of those facilities and will need them into the future. The Bombardier plant has got planning and is well under construction. I understand that it is due to go into operation later this year. I know that plant may well end up taking some of the residual waste. Initially, when it came forward, it was to deal with commercial/industrial waste, but I understand that it went for an increase from 120,000 tons to 180,000 tons per annum and that some of that material may well be residual waste. However, that will still leave a significant slug of residual waste to be dealt with, and that is where the Arc21 project, if it gets planning approval, would come into play.

Mr Swann: I go back to the exporting of residual derived fuels. You spoke of 170,000 tons per year being exported and said that we were losing the benefit from that. What is the financial loss to our economy? I assume that we are paying for that to be exported and that it is not being bought from us.

Mr McVicker: I am sorry; I cannot give you the answer to that off the top of my head, Robin, but I can dig it out. In general terms, we are shipping fuel out of the country that has a renewable value.

Mr Swann: Am I right in saying that we are paying to get rid of it? It is not as if there are people coming here to buy it.

Mr McVicker: It is a cost. Those will be commercial deals that will have been done between the companies exporting it and the plant receiving it. That is why I do not know what the figure is.

Mr Swann: Is it Sweden, mostly?

Mr McVicker: There are different plants: some in Sweden and some in Germany. Various plants have excess capacity at this time, but that may change under the circular economy because there will be a clamour for that surplus capacity in EFW plants in mainland Europe.

Mr Swann: Do you have a cost value for a ton of residual derived fuel? Do you have a figure?

Mr McVicker: It varies. Some of these plants are quite aged. They have been operational, so they can operate at a fairly marginal cost because the initial capital cost to build them, which is significant, is essentially written down. So, it can be cheaper to put it in there, although you have to layer that up with the significant logistical costs of getting it there. As I said, I think that those costs, as a general trend, will increase, because there will be a clamour for the surplus capacity from other EU nations that have to comply with the circular economy package when it is agreed.

Mr Swann: Owen, you mentioned the mattress scheme. It is a very small thing, I suppose, but when I was Chair of the Employment and Learning Committee we had an inquiry into support mechanisms for post-19 special educational needs. USEL was one of the facilities that we visited. We were very impressed with what they do and how they do it. Where did the initiative come from? Did it come from USEL? Did it come from the Department?

Mr O Lyttle: In this case, Belfast City Council engaged with USEL about mattress recycling. As ever, through the grapevine, it came to my desk, and I went to see them to discuss the potential. I think that it comes back to the ethos of a company. If a company looks at the material that they are producing as waste, they will manage that waste; if they look at it as a potential commodity to add value, there is a totally different emphasis. Fortunately, the team in USEL at that time was the right team, and they thought, "What can we do?". Of course, their core business is creating jobs. They asked, "How can we use a circular economy to create jobs?". My colleagues in the Department and I were able to give them information and direct them to people. As a result, they now employ the first circular economy manager in Northern Ireland. Initially, many of the components in the mattresses were going for energy from waste, but with research and investment, they have driven down costs, and they are now looking for more of those components to go to recycling. As part of the next stage, they are engaging with other Departments, etc, to see whether they can get assistance to look at new products so that waste does not become waste but a commodity that they can use to make new products.

As I said before, it comes down to the ethos. It is about innovation; it is about looking at things differently; it is about people starting to look at what they are producing and saying that it is not waste

but a commodity. I think that it comes from the sensitivity that people have about the export of waste to Europe and the world. We would not critique the situation if someone was mining aggregate, for instance, and it went to other parts of the world. We would accept that it is a commodity and is being transferred, so what is the difference if it is a quality recyclate? It is just a raw material for someone else. We have to get away from the sensitivities that this is waste; it is a valuable component, and, at the moment, we are probably misusing it. With more innovation, such as the team at USEL and other good examples of manufacturing firms across the Province that I mentioned, we can change the emphasis, and people will look for opportunities to use it in Northern Ireland as opposed to dumbing down the waste hierarchy.

Mr Swann: Going back to the process that USEL created, is it shared by USEL with other voluntary and community organisations? Does the Department play a role in trying to get that out to other organisations that are doing the same thing? I am thinking of Can Can in Ballymoney in my constituency, which works along those lines. Or is it a USEL process?

Mr O Lyttle: This is relatively novel for USEL this year. We have engaged at quite a number of meetings, and it is engaging with its own Department, the Department for Communities, and other agencies. The initial success has been quite rapid. Of course, time is an issue. I know that USEL is engaging with other third-sector organisations about how it can broaden different concepts and potentially go beyond mattresses and look at the refurbishment of other bulky waste furniture. A key difference with USEL is that it is effectively a manufacturing business that is looking at a commodity rather than waste to produce stuff. If it had been a waste management firm, that would not have happened.

USEL already has the manufacturing capacity and is now using that to broaden its range of products, and that means that it can pull in other third-sector organisations. I know that USEL has been discussing that. USEL's chief executive Bill Atkinson has a vision and a plan of other streams that he could pull in and do stuff with. It is quite exciting, and it could create jobs, and not just in the Belfast area. As was highlighted by last year's report by ReNEW (Resource Innovation Network for European Waste) and WRAP (Waste and Resources Action Programme), one of the benefits of the circular economy is that it can produce mid-range skill jobs across the Province. This is an opportunity that we need to look at because it will not be just low-skilled jobs centred in Belfast; there is potential to push this out into the counties of the Province.

Mr Swann: That is what we want to hear, Owen.

Mr Poots: How much do we believe it costs per ton to get rid of waste through energy from waste?

Mr McVicker: How much is the cost?

Mr Poots: What is a typical cost?

Mr McVicker: I think that a typical cost would be in excess of £100 a ton.

Mr Poots: Without the landfill tax, how much is it to get rid of it in landfill?

Mr McVicker: Typically, it is £30 a ton or something like that.

Mr Poots: There was some clarification this week that we are probably going for a hard Brexit. Throughout the campaign, people were saying that, if you want to be part of the single market, you will have to abide by European regulations across a range of issues. Environmentally, I would much prefer to go down the route of EFW, but, financially, that question is an important one. We are in the midst of a circumstance with the renewable heat incentive, for example, where there is a cost to the public purse of £20 million while it remains unchanged and the public are baulking at that. We have the second highest cost for electricity anywhere in Europe because of a deal that was negotiated in 1991. I am somewhat uneasy that we end up taking on schemes, which will ultimately be paid for by the public, that are not necessary.

When we visited the illegal waste site, I was taken by the fact that no steps had been taken to ensure that there was no leachate or anything else. It came within quite a small number of metres from a main waterway. It is being tested weekly, but they are not finding the contamination that exists there.

I pose those questions because I think that they will be relevant as we go forward. Why would we spend an additional £70 per ton to get rid of 500,000 tons of waste every year if we do not have to?

Mr Mills: There are a lot of points in there. I suppose —

Mr Poots: They are not controversial or anything.

Mr Mills: Well, I think that there was some controversial stuff in there. One of the main things is that we are going to run out of landfill. If the argument is that somehow landfill is cheaper or simpler —

Mr Poots: There are quite a lot of old quarries not being used.

Mr Mills: That may well be, but we understand that the last landfill site took 20 years from initial conception to being used as a landfill site. Understandably, nobody wants a landfill site next to them.

Mr Poots: People have not been looking at it because the whole direction was away from landfill. No one has been looking at doing landfill sites because the costs were prohibitive because of the landfill tax.

Mr Mills: Yes, indeed. In simple cost terms, one of the things about the export of waste from energy is that, as we said, it is variable. There is increased competition from higher targets, regardless, and, again, you mentioned hard Brexit, but even if the UK does not adopt circular economy higher targets, we can anticipate that the rest of Europe will, thus putting pressure on energy-from-waste facilities as regards competition in Europe. That cost is a high risk to councils. Waste disposal is a quarter to a fifth of all council budgets; it is a considerable sum to play risks with. Those are all factors that argue in favour of having indigenous capacity for energy-from-waste facilities.

Mr McVicker: One of the other things is that, with landfill, you have longer-term issues with managing the leachate, notwithstanding what you saw at Mobuoy Road, and landfill gas and aftercare costs for several decades. The tax point as well provides more of a level playing field because the £85 per ton that goes to HM Treasury, plus the gate fee on top of that, is there or thereabouts with the cost that you pay for a ton of waste going into an energy-from-waste plant, which, again, gives you something back in relation to your point about the cost of energy in Northern Ireland. If we were putting some of that energy back in from a renewable source, which, essentially, is what our residual waste is, there would be greater benefits achieved from Northern Ireland having some indigenous energy-from-waste capacity.

Mr Poots: OK. It is interesting. Maybe the public are not as in love with paying for renewable energy as you might think.

Mr McKee: You did not touch much on hazardous waste in your presentation, but there are 49,000 tons of hazardous waste in Northern Ireland. I am interested to know where that goes because, apparently, we do not have a great deal of infrastructure to deal with it, particularly in landfill sites. What landfill sites can take it? Can you enlighten me as to where it goes?

Mr Mills: In general terms, we do not have specific sites for hazardous waste in Northern Ireland; it largely goes to GB. It is a relatively small tonnage, and it comes back to the point that Mr Poots made about what is economically a sensible thing to do, whether it may be that the business case is to export it.

Mr McVicker: The hazardous waste side of things has, for a long time, been very tightly controlled and regulated. My background started originally in the hazardous waste side of the business. There are companies operating in Northern Ireland that have treatment plants operating under a permit that deal with the hazardous waste tonnages that you are talking about.

Fewer and fewer hazardous materials can go to landfill. The big one is probably asbestos: there is a special cell at one of the landfill sites in Northern Ireland that can take it. If asbestos is kept in one piece, is not broken up, and has been encapsulated, about the safest thing that you can do is bury it. So, putting it in a cell, knowing where that cell is, and marking it for future generations is a good way of dealing with asbestos.

Most hazardous wastes will go through a treatment plant, some of them on this island, while other hazardous wastes may have to be moved to high-temperature incineration, for instance, in Great Britain. That is done under a very tight duty-of-care, special waste paperwork consignment note process.

Mr McKee: What are we doing about producer responsibility? For example, I be amazed at the packaging in big supermarkets; there can be massive packaging with a tiny item in it. You could eat it in a second for all that is in it. Is that not waste? What responsibility are the supermarkets taking? That is just one example; I am sure that there are others. What are they doing? Should they not take more responsibility for how they package their products?

Mr O Lyttle: I will hopefully give you some sort of answer. There are producer responsibility targets, but, concurrently, over the last number of years, the industry has been working with the home nations and the resource and action programme through the Courtauld commitment voluntary agreement to see how it can address food waste, packaging, etc. Some of the successes have been to trial different types of packaging such as, for instance, reducing the weight of a can of food or glass or converting to plastic. That does not seem much, but, when you are shipping hundreds of thousands of elements, it is not just about the material tonnage that you are saving in waste; it is also about the cost and energy to transport that reduced weight.

In addition, some people may look at something and say, "That is excessive packaging", but a lot of study has been done, through the voluntary commitment, to look at the best packaging and to make sure that goods arrive in high-quality condition so that there is no wastage of goods. For instance, you may think that there is a lot of cardboard on electrical commodities, but, a few years ago, there would have been a lot more polystyrene. Many more organisations now use cardboard inserts, etc. That is recyclable. Polystyrene is not readily or widely recyclable. Even though it still looks like a lot of packaging, much of it is now recyclable, and a lot of it is there to reduce the damage to goods so that we do not waste goods and create more waste. That is of particular importance in the food industry where, for instance, you need to protect some soft fruits because, if you do not, you will have a lot more wastage during transportation. Therefore, in the whole life cycle, you generate a lot more waste and energy usage to cover that. It is more complex.

There is still a lot of work to do, and, as I said, the home nations are working with organisations and businesses through the WRAP Courtauld commitment to increase recyclable content and to reduce packaging. It is a slow process, but that is the current state of affairs.

Mr McKee: The Mobuoy site was mentioned: is there any movement on it? It is dead in the water. Will some results come from that? We read in the Committee pack the suggestion that the polluter pays. Will the polluter be responsible for whatever it takes to resolve the issue, or will it fall to the taxpayer?

Mr Mills: That is being looked at at the moment. There are ongoing proceedings on that issue, including prosecutions and, indeed, recovery in respect of Mobuoy.

Mr McVicker: I can add one other thing because I am involved in that. A process is being looked at for remediation techniques through what is known as the small business research initiative, which is being run through the Northern Ireland Environment Agency. John is absolutely right. The main part of your question is about where the cost of all that remediation lies; however, because there is an ongoing criminal investigation, I guess that we cannot comment on that today.

The Acting Chairperson (Mr Ford): To pick up on Harold's point, there are research papers in the "matters arising" pack on hazardous waste, the German experience and the idea that the polluter pays, which I suspect may be of more interest to the Committee after 2 March or at some indeterminate date in the future than they probably are in members' minds now.

No other members have indicated that they want to ask a question, so I thank you all for coming in for the presentation. We look forward to seeing progress in the coming months and years.