TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Recycling and Waste Management

Melbourne—Tuesday, 8 October 2019

MEMBERS

Mr Cesar Melhem—Chair Mr David Limbrick
Mr Clifford Hayes—Deputy Chair Mr Andy Meddick
Mr Bruce Atkinson Dr Samantha Ratnam
Ms Melina Bath Ms Nina Taylor
Mr Jeff Bourman Ms Sonja Terpstra

PARTICIPATING MEMBERS

Ms Georgie Crozier Mr David Davis
Dr Catherine Cumming Mr Tim Quilty

WITNESSES

Ms Kirsty Bishop-Fox, and

Ms Elisabeth van Roosendael, Zero Waste Victoria.

The DEPUTY CHAIR: Good morning. I declare open the Environment and Planning Standing Committee's public hearing. All mobile phones should now be turned to silent. I want to welcome witnesses, members of the public and media, if present. The Committee is hearing evidence today in relation to the Inquiry into Recycling and Waste Management and evidence is being recorded. I welcome witnesses today, Kirsty Bishop-Fox and Elisabeth van Roosendael.

All evidence taken at this hearing is protected by parliamentary privilege as provided by the *Constitution Act 1975* and further subject to the provisions of the Legislative Council standing orders, therefore the information you give today is protected by law; however, any comments repeated outside this hearing may not be protected. Any deliberately false evidence or misleading of the committee may be considered contempt of Parliament. All evidence is being recorded. You will be provided with a proof version of the transcript in the next few days.

We have allowed 45 minutes for this session to ensure there is sufficient time for questions. The committee asks that any opening comments be kept to five to 10 minutes. We might start off with you making a presentation, either jointly or separately or however you wish.

Ms BISHOP-FOX: I will start and Elisabeth will have her section at the end.

The DEPUTY CHAIR: Terrific. Okay.

Ms BISHOP-FOX: I brought Elisabeth for intention because her area is fashion and fashion waste, and that is not—look at us—my thing.

The DEPUTY CHAIR: Okay, after you have made a presentation I am sure the other committee members will have questions for you.

Ms BISHOP-FOX: Yes. Thank you for having us here today. I really appreciate the opportunity. It is really valuable to be able to speak and represent Zero Waste Victoria and the broader community. I would also like to mention small business as well in the sense that a lot of this is related to small business—small businesses that I deal with on a personal level and as a consultant too. I have got some slides to help me through. I have a lot to cover and I am going to try and squeeze it into the time, which will be a challenge for me, but I will try.

Visual presentation.

Ms BISHOP-FOX: One of the things I wanted to speak about is what we should approach with waste and recycling management. That is why we are here today; that is what we are thinking about—and I may think about it quite differently to many people in the sense that I look at waste and recycling holistically. Waste is not a standalone issue in my mind. There are many aspects to it, such as how it is created in the first place, how it was used and how it can be reused or not. I think one of the biggest problems with waste right now is we look at waste and we think, 'How do we need to figure it out?', and we cannot, because we are not looking at it completely.

We need to acknowledge responsibility. Who is responsible for waste? Is it the person? Is it the end user who gets the waste? I accidentally got hold of this, and I will explain more about that in a minute. If I have this packet, it is my responsibility now. But somebody sold that packet—in fact they sold it to my children. Somebody put it on the shelf, somebody ordered it, somebody manufactured it and allowed it to be brought into this country. Now I am going to put it in my bin and pass that responsibility onto somebody else. So whose responsibility is this packet? And that is what we need to address in many, many ways. We are going to have to accept that some of this responsibility is going to be tough, because as a consumer it is my responsibility now, but as a manufacturer they have a responsibility to deal with that too, and as a government you have to look at that and say, 'Where do we stop the buck?'. Changes will need to be made, and not everybody is going to like

them, but if we do not do that, then in 10 or 20 years time my children and their peers are going to be sitting here having this same conversation, and I do not think anyone in this room wants that to happen. So therefore we must set ambitious targets.

What I have got in here today are some things that I think are ambitious. I hope you have heard some of this before, but I expect some of it you may not have, and I hope that that can stretch your thinking. I would like to assume you are here with an open mind and that is why you have got us here. The points I am going to cover today—I am not going to get into all of them, but I am going to try and touch on these in 5 minutes or less. The circular economy is something that we really do need to look at and consider when we look at waste and how we can define it. I have sat through sessions with DELWP, who are reviewing the circular economy now, and I am sure you are aware of that process. In a linear economy it is very obvious: rubbish comes in; rubbish goes out. The recycling economy and circular economy in my mind often get blurred when I see definitions. A recycling economy to me is where we use it, recycle it and then try and figure it out. So if we are going to landfill it, that is not a circular economy. If we are going to incinerate it, that is not circular. If we are going to take glass and put it into a road base, that is a recycling economy because that glass is lost. The same with plastic: it just goes into a park bench and goes into a school and we need new plastic in. That cannot be considered part of the circular economy. The public thinks circular goes around and around and around—in the simplicity of a child. Once that resource is lost and undervalued, it is gone. That is pretty much what I have said.

A lot of this ties into product stewardship, and what is interesting with product stewardship, or extended producer responsibility, is that some manufacturers and retailers take accountability for what they produce but many of them do not. We have to look at those who are doing the right thing and want to do the right thing and support them. There are many businesses, particularly big businesses, though sometimes small can fit into that too, and they are dictating what happens. I sat in a circular economy workshop with DELWP. I sat beside a member from a supermarket—it happened to be Coles, but it could have been any of them—and when I explained that we should have refillable glass for milk bottles and re-usable containers in their stores, they explained every reason why we could not do it. But here I am today—I told you I had props—this was the milk bottle I used for breakfast. That milk bottle is going to go back to the manufacturer, and it is going to be refilled. This lid is going to be sent off to be turned into prosthetic limbs. This I will need to recycle. In fact that label here is because of legislation; there is no way around it. He would have preferred not to have it there—that is my understanding. So it can be done, and small businesses are proving it. Big businesses often say, 'It can't'. I'm not sure why, but we can get to that later, I suppose.

People often buy things not realising they cannot dispose of them responsibly. This packet is an example. Composite materials—if you look inside here, this is a combination of paper and plastic. A confusing thing with this is I actually have done a couple of things to make the most of this waste that we created. First of all, I have done a survey and actually asked people how they would dispose of this. The results are not consistent. I have also contacted councils. I contacted six yesterday and two have got back to me, and their results are polar opposite as to what we should do. One suggested that we should recycle it and the other suggested that we should just landfill it all. I do not believe either of those is the best solution.

One of the problems with product stewardship and responsibility is that plastic is not competitive—recycled plastic is not competitive at all. When they take this plastic if I put it into recycle, it might turn into a park bench, but the person who buys that park bench is going to pay for the privilege of using my plastic. Is that the way it ought to be, or should I pay for the privilege of disposing of it? Recycled plastic costs more than virgin plastic, and we need to level that. We must address the real cost of disposing and we must put in pricing mechanisms so we can recycle our waste effectively and efficiently. If we have it, it needs to be a user pays, not a let us take it on.

Am I going too quickly? Because I have got a lot to get through. I am going to race through this because I know that I will be time-stopped soon.

This is a photo I put up just yesterday morning. I had this idea about 24 hours ago. I had an ambitious target, and I use ambitious targets because I would like you to set them as well. I wanted to get 100 responses to my survey before I came. I would have quietly been happy with 50. I had 200 before I left home this morning. I know it is higher now. This shows you how many people would have put this into landfill and gone to REDcycle. Now, I put this to Zero Waste Victoria. This is a Facebook group who are pretty responsive and

pretty good when it comes to these things. In the evening I did put into some localised groups, and I saw that the pie chart changed. I mention that because some of these may be skewed if we went to the general public: half the people would have put it into land waste, about a third would have put it into kerbside recycling, 15 per cent to REDcycle and a lot would have tried to separate this. These are special people. This is not your average public here. When I asked them what they would do with the waxy paper, most put the right thing—to landfill—but some do want to try to compost it. Maybe they can; I am not quite sure. But some would still try and kerbside or REDcycle it, and that is not the correct answer.

Then I asked them if they think they are a good recycler. Fifteen per cent think that they are and 38 per cent try. I believe this is quite skewed because of the subset we had, and if we asked the general public, the yellow would be the largest section—there is absolutely no doubt in my mind—because the red section that says 'Yes, I try and avoid packaging' are my zero-waster crew coming through.

Now, how sure are you that your packaging is—3 per cent are confident they got that right, which is interesting, because 15 per cent think they are pretty good at recycling. I just wanted to run through that quickly there.

The waste hierarchy: I used to talk about this a lot. I do presentations to students and to councils about how we can reduce our waste. We could extend that a lot in terms of repair, repurpose, a lot of things that we can do to keep our waste down. What actually surprised me when I started looking at government policy is that their hierarchy is not too different to ours. This is the national one, and I know the state one is quite similar: where we look at avoiding waste, reducing, re-using, recycling, recovery and all the rest.

The main difference between the grassroots approach is that we actually start at avoiding waste and do our best to do it. What I find with society and the government system is we are look at recycling and saying our system is broken, and then we move down. I know there is a fund with a lot of money sitting there and you are trying to figure out how to spend it. I urge you to look to the top of the hierarchy and work your way down. Recycling is important. We have got a lot of rubbish that we need to deal with, but if we only look at recycling and not what the cause of it is, and look at systems to avoid waste, we are going to be going around and we are going to be here again and again.

The first thing to reduce waste is a container deposit scheme. I am not going to talk about this in depth because I am sure it has come up many times before, but I hope I am going to take you on a different angle that is not spoken of a lot. It comes back to the glass. I think you all know that glass is very, very problematic when it comes to recycling systems. It breaks and destroys paper. Glass is one of the most disrespected resources that we have right now. Why would somebody take a glass like this—which I think once had, maybe, peanut butter or jam—use it, smash it and make a glass again and then try and put the shards into road base because we do not know what to do with it? Can't we refill more? I have put jam into jars like this, and I went to a store and put these in the other day. We could extend our container deposit scheme, because we are so far behind. Can we come from this space and come from behind? Yes. Imagine if we could return jars like this and they could be refilled and go back to a supermarket? I do not see why they cannot be. Imagine if we could do this. Now, when I was a little girl—it shows my age—this was not new; this was a thing. This is how we got milk. Our neighbours got soft drink. We did not, but they got soft drink in glass. It was returnable glass. The same thing could be done. It is not new. It is not even innovative—except it is. So we need to look at this with soft drink, wine, anything that comes in a bottle, anything that comes in a glass. All our supermarket packaging in glass could be dealt with this way. So I hope that we can look at our container deposit scheme and say Victoria is the last one to do this. I do not know why there is so much resistance. Maybe you are looking to make it better. This is how. I am going to move on, and I hope you can come back to that with question time.

Waste to energy is a really, really important one, and it is a really, really big one, because it is a great way to keep things out of landfill. However, I am concerned with waste to energy that it could undermine the waste hierarchy that we spoke about, and by 'could' I mean will. I have actually sat through presentations out at Laverton. When I was at the circular economy with DELWP I had the privilege to sit beside a man—I forget his name—from Australian Paper mills, and I asked a lot of questions. I have done readings. I have made submissions. I have got a very good understanding of how this can work. My understanding is that councils would be required to be locked into contracts. Depending on the company, they are looking at 10 or 25 years. Now, I see that as being a very short-term solution but a long-term contract. It is short-term, because if we looked at avoiding waste, then they would not have so much waste there. What happens if they have a certain

amount of waste now and we bring in a great container deposit scheme, we bring in avoidance schemes, we take food waste out and they cannot fulfil that contract? Are they going to be obligated to fulfil that contract, or sued, as I have heard is happening in the States? Not on my watch. It is not supportive of the circular economy. Anything that is burnt or incinerated is gone. We might have energy out of it, but it is gone.

My understanding, from research I have done, is that 2.2 million tonnes of kerbside garbage, recyclables and organics were collected in Victorian 2017–18 and 1.18 of that was residual waste. The biggest plant I know of is Australian Paper mills, and they are looking to lock in 650 000 tonnes. I think 100 000 of that would be commercial, but 550 would be council waste. That is half of the waste that Victoria collected last year—half. Now, if we were talking about one plant, they might almost get away with it, but there is one in Laverton, there is a proposal in Ballarat and Hume has just got one out in Dandenong. That is five of them. That is far more waste than we produce. It is really, really important that we do not have more infrastructure than we need. I believe we should put a moratorium on waste to energy effective immediately while we sort out what we are doing so businesses do not overcapitalise with hundreds of millions of dollars and councils are not contracted to waste that they cannot provide. I am not recommending that we do it, but if we do, a lot more thought needs to be put into it now.

I have a list of questions here that ought to be considered if we are going to go down that path, and I say 'if' because I recommend against that quite strongly. My concern is emissions and how they will be monitored. Are they going to be monitored standalone for one single unit, or are they going to be monitored for the area? A proposal in Gippsland, Latrobe, is 5 kilometres away from the nearest house, but in Laverton it is just 1.7 kilometres in a heavy industrial area. If that was the only plant there, it might be okay—it might not—but there is industry around it, and collectively it adds up. What by-products are going to come from this and how will they be stored? What testing will be done and how much will the EPA bend the rules to get the testing through? And I am not saying that being derogatory to the EPA by any stretch. I have just read submissions that have been put in to the EPA, and I have a lot of concerns about them.

I am also concerned with a loophole they seem to be working with: to call it renewable. You know, if they are actually burning organic waste like food waste, yes, sure, maybe it is renewable—we should be composting it—but if they are actually burning residual plastic waste, that is non-renewable; it is fossil fuel, and they cannot call it that. That really needs to be strongly defined. They cannot be getting credits for burning plastic.

What is an acceptable distance to residential neighbours? There really is a long, long list of questions. When I went to the one at Laverton—I am from the other side of town—I had a list of questions I was ready to ask them, but I sat back while the community got emotional. The community got emotional for lots of reasons. My biggest concern was that the community were not notified effectively. I am on the list from Engage Victoria to get these notifications. I did not get it. I found out from somebody who happened to know because I have a contact at the EPA, so the public consultation I found out through inside information. We need to be more transparent with these types of things.

E-waste is the last thing I am going to touch on, although I could keep going there. My biggest concern with e-waste is that people do not know what it is. This was a survey that I had university students do. I just came in for a day. It was about 265 people, or 235, that did this. Just over half of the people said they knew what it is. I believe this figure is quite high—this was preliminary research—because when you ask people what e-waste is, you get things like televisions, computers and mobile phones, which is kind of right, but it is the battery and the power cord. When I ask that question, I think the figure is much lower. Then we asked them: did you know a ban was introduced? Twenty-one per cent said yes. So if you took that 21 per cent, I would say half of that 21 per cent actually know that it is a power cord and battery. This ban was supposed to be introduced in July 2018, but it was delayed for 12 months so we could get it right. My big concern is that people do not know what it is, but they want to know, and if they knew, then they could make that difference. We do not want that to manage. I think I have said enough, although I could say more. I will pass you to Elisabeth, if that is okay.

Ms van ROOSENDAEL: Briefly.

The DEPUTY CHAIR: Thank you, Elisabeth. Briefly, yes.

Ms van ROOSENDAEL: Fashion waste is currently quite a huge problem in Australia. It is predominantly handled at quite a large cost to charities and not for profits that could otherwise be directed to different social programs. So predominately there is no responsibility or onus placed upon large corporations or individuals to carefully dispose of or re-use their fashion waste. The majority of garments that are consumed per year end up straight in landfill. On average, we feel, about 2.5 MCGs nationally are filled with fashion waste. This not only has a huge negative impact on the environment but is also a loss to our economy, because these are resources that could either be re-used through different business models or repurposed and remanufactured, but currently we only have a very small capacity to recycle it, which results in downcycling and downgrading the quality of the material. There are no real regulations or innovative infrastructure around being able to separate different types of quality of fabrics, and often different types of fabrics from lower-grade fashion waste can have toxic elements in them. They sort of end up getting mixed in with perhaps higher-grade quality fabrics. There are some really amazing innovative business models, from not for profits to for profits, that are being generated and helping to reduce fashion waste. There is a large amount of infrastructure and access to these types of resources across the whole board around fashion waste. So, yes, it is really about having access and support for these different types of organisations that are trying to compete and have access to a market that is not having to be held responsible for the waste that it is producing or for the true cost of where these resources are coming from

The DEPUTY CHAIR: Thanks, Elisabeth. So that is pointing at better product stewardship for all clothing and fashion.

Ms van ROOSENDAEL: Better product stewardship, yes, and also assistance for different start-ups that are creating innovative models that are helping with the reduction of fashion waste as well.

The DEPUTY CHAIR: I just wanted to ask you, first of all, can you make your presentation available? The schematics are not in the submission.

Ms BISHOP-FOX: Yes, absolutely—more than happy to.

The DEPUTY CHAIR: Thank you very much. And I just wanted to ask about single-use plastics. Would you recommend banning single-use plastics? How do you deal with the issue of plastic that really is not recyclable?

Ms BISHOP-FOX: Yes, that is a good one which I did not get to. Yes, absolutely we do need to look at banning and prohibiting them, especially plastic that cannot be recycled. We have got to be very careful with what we do in their place, because to ban single-use plastic and have another disposable item could be solving one problem and creating another. For instance, if we had something that was biodegradable or compostable but it ended up in landfill, well, it is still in landfill. And if it is organic in landfill, it is going to create methane, so we really need to look at that. We need to look at re-use as being the ultimate solution, and if we cannot re-use, then what?

We also need to look at how we produce the replacement. So if we need to take crop land and use land to create the paper or the cardboard or whatever it is to do that, then that is a factor. There are some great things being done with sugarcane waste. They are turning waste into a plastic bag or something like that, and that is okay, but we have still got to look at the aspects there. If we continue to use and throw, we will go around in circles forever.

The DEPUTY CHAIR: Just on that, would you imagine that plastic wrapping could be washed and re-used? I am just wondering if you think that is a possibility or—

Ms BISHOP-FOX: Can plastic wrapping be washed and re-used? I do know people who wash Glad wrap. That is not what I do or recommend, but some people do. There are substitutes that you can get for plastic that can be re-used.

Mr MELHEM: Just a quick question, and my apologies for running late. Going back to waste to energy and landfill, if we follow the hierarchy you put up, which I agree with, or the current national one as well—

Ms BISHOP-FOX: I did show that. I cannot remember when you came in.

The DEPUTY CHAIR: Yes, I saw it.

Mr MELHEM: That is all right. I did come in for that. So whatever we cannot use of the last bit, there is a choice of that going into a landfill—I do not know if you have ever lived next to a landfill; I have and I still do—versus it going to waste to energy, and I am not favouring particular technology. We are having a choice. We have followed the hierarchy, but we still have got leftover we cannot do anything with. So going to landfill or waste to energy, surely the waste-to-energy choice is better than landfill for all sorts of reasons. Do you agree with that approach or are you still—

Ms BISHOP-FOX: I think it depends on what degree. The reality is our waste has to be managed, and I believe that we are in this mess because we have not looked at how we create waste.

Mr MELHEM: Agreed.

Ms BISHOP-FOX: We are letting, we are allowing, waste to be brought in. Look, I do not disrespect China for knocking back our waste; it is ridiculous they take it. However, we are still importing it. This is imported. This came from another country; it came from Korea. So I think that while, yes, we do need to manage that, we just need to have a higher focus on reducing it. I do believe we can reduce it to the point such that landfill is negligible and waste to energy is negligible as well.

Mr MELHEM: No, and that is why I am agreeing with you. What I am saying to you is: I accept all that, but now we are going to the last bit—hopefully going to 5 per cent, 1 per cent, 10 per cent, whatever it is. If it is a choice of going to landfill or a waste-to-energy plant, don't you think the waste-to-energy plant is much better for the environment and the community than a landfill, which creates the methane, the leaching—

Ms BISHOP-FOX: It depends where that—

Mr MELHEM: and landfills in residential areas—

Ms van ROOSENDAEL: Can I just add to that? So waste to energy will require a particular contract and a consistent amount of production of that waste for waste to energy for that infrastructure to be able to be viable. So overseas, when waste has been reduced and these waste-to-energy plants have not had the right amount of waste that has been a contractual obligation via councils or whatever, those councils or those particular organisations that are supposed to supply that residual—

Mr MELHEM: There is one example out of thousands—anyway, I will move on.

Ms van ROOSENDAEL: So basically, initially it can appear like a desirable outcome, but long term if it does not support the continual reduction of waste, then it should not be adopted.

Ms TERPSTRA: Just on the hierarchy of waste, you are putting a lot of emphasis on, 'Why are we are creating something in the first place?', which I agree with. But there are some streams of waste which are unavoidable—for example, medical waste. The ability to recycle that is quite negligible. I do not mean to say that there cannot be practices in our medical or hospital systems that minimise waste, but in terms of surgery there are those sorts of things that are used to mop up blood and other human stuff that goes on. You also have other by-products that come out of surgery as well. If you are having your appendix removed, it gets disposed of. Where does it go? So there are things that are nasty in our waste streams, and that is why I think when you are talking about ultimate disposal, there are things that are easier to think about in terms of, 'Don't produce it if we don't need it'. And I think you mentioned earlier supermarkets where people can bring their own containers. In fact we heard last week—I asked the same question—this is happening overseas, other supermarkets are allowing people to bring their own containers and they are washing them out. That was something that smaller supermarkets indicated would be extremely problematic for them to adopt here. So I think there are a variety of players in this space that can either see it as a positive or not. I am just saying that we can talk in circles around all these things, but I think there are some aspects of our waste that we produce that are going to be very, very difficult to not produce but also then to recycle. What would you suggest would be something that we could do, for example, with medical waste as an alternative?

Ms BISHOP-FOX: I agree. Medical waste is a challenge, but I do believe that medical waste is more excessive than it needs to be. I had a conversation with my dentist. I would go to my dentist and everything is covered with plastic: the chair, the cup. I would go to the dentist and I would drink out of a plastic cup—it is medical waste.

Ms TERPSTRA: Yeah, so I agree with you that there are still things we can do, but I am talking about specifically when you are operating on someone and you have got blood and stuff, what to do with that?

Ms BISHOP-FOX: What do you do with that? I guess technically you can compost blood. It can go into an anaerobic digester or something like that. Now, I will be up front: that is not something I have explored and medical waste is not my forte, but my understanding is that once it reaches a certain temperature it is treated. I do not know if that can be done through other means, but it is something that probably has not been explored. I do know they used to sterilise equipment and they do sterilise equipment. In fact the dentist who I have had a great conversation with does sterilise the equipment. Unfortunately that sterilised equipment goes into plastic ready and waiting. But sterilising equipment can reduce a lot of waste. I have spoken to a doctor about this from Doctors for the Environment, and she said that sometimes is not even cost saving or better, it is just convenient. So medical waste is important but it can be reviewed.

Ms TERPSTRA: It is problematic. What do you do with body parts that have been removed, for example? You know, an appendix.

Ms BISHOP-FOX: That is a good question I have not been asked before. I like the question. It is a very good question.

The DEPUTY CHAIR: Sorry, I might move on there.

Ms TERPSTRA: No, but it is a reality because it is waste.

Ms TAYLOR: Could you take it on notice; could you look into it?

Ms BISHOP-FOX: I am happy to look into it.

The DEPUTY CHAIR: That is a possibility.

Ms TERPSTRA: Just one other question on the waste-to-energy side. We have a lot of discussion around, you know, we have heard about these things overseas where someone is suing someone because they could not produce enough waste, but isn't that a reflection of contract design? I mean if the contract is written specifically to avoid those issues, and if we are able to learn from those sorts of examples, that is something that is avoidable so that people do not bear responsibility. I think there is only one example that we might have heard of where that has happened overseas. I do not know that it is that widespread. Certainly they would not have been the first organisation to have been caught out by poor contract design or poor writing of a contract. So isn't that more of a reflection of the contract and that sort of commercial environment as opposed to—

Ms BISHOP-FOX: It could be, yes. I think the big thing with that is just how can a council get out of it? The reality is it kind of works both ways in that once upon a time, not that long ago, councils were paid for their recycling; they actually made money out of recycling. Now that has flipped around and it costs them money. And obviously there was something in the contract that enabled that to happen—and that is fair, but it has to work both ways.

If a council agreed to supply a certain amount of waste and then for whatever reason that waste changed—perhaps a new technology came about or legislation came in and food waste was no longer allowed to go into landfill because if you remove 100 per cent of food waste and organics, you remove your methane—the amount of waste they provided would be reduced by half. So if the contract enabled them to go, 'Okay, half is what we get and that is okay', then that would be a safeguard. If the contract said, 'Okay, there is another technology happening or something that means we can honour the hierarchy', that means, 'Okay, now we can only have 20 per cent of your waste because now you are managing 80 per cent responsibly', that is okay. That is absolutely what needs to be considered. Does business want that? No, it needs a guaranteed feedstock to do that. So that is the challenge that is going to happen with that.

The DEPUTY CHAIR: I have got to get around the whole committee; they have all got questions for you. Very interesting.

Dr RATNAM: Thank you so much for your presentation; that was really insightful. In terms of what I have heard—and we have been having a robust discussion, particularly on waste to energy—from your presentation is about the need for an emphasis on waste reduction before we invest very significant amounts in large-scale waste to energy that locks in huge amounts of waste before we have actually attempted to reduce those levels of waste down to the point that we know and can calibrate whether that infrastructure investment is worth the effort. That is what I have taken away from your presentation—it is the heeding of the caution that we have got to do the work on reduction before we say, 'We're going to lock in this much waste from the whole economy'. So I thank you for that—that is what I took away from your presentation—and I also thank you for your written submission, and I want to take up one point that you brought up within that. It was a very good submission—very broad. You talked in terms of possible solutions and where the State Government could play a role and you talked about legislating to prohibit avoidable and unnecessary sources of waste and ensure waste is managed responsibly. I was wondering if you could elaborate on that. Have you heard of any good examples? We are looking for solutions that we could recommend—for example, other countries that have been able to legislate. Please expand on that, because we are looking for what we could do and what we could recommend for the Government to do straight away.

The DEPUTY CHAIR: Kirsty, before you start, I have got two other people that want to ask questions so when Sam says 'elaborate', could you elaborate briefly please?

Ms BISHOP-FOX: Okay. I forgot to show this before. This is an example where manufacturers must use this once—it can only be used once and it must be disposed of. I use this container again and again, but legislation prevents them from re-using it. This is a really good example because I just learned this yesterday from a small business. My understanding is that this is recycled material—Australian recycled material. Not all egg containers are Australian recycled material. If this could be re-used, that would save a lot of waste to start with. If this packaging was prohibited because it is composite and cannot be recycled, you can buy lollies other ways. And these are very simplistic things, I know, but they are what I have right now. A toaster often cannot be repaired; it cannot be disassembled and reassembled. If products were manufactured so we could repair them and upgrade them, that would make a huge difference.

Ms TAYLOR: I have two questions, and I will be as snappy as I can. Just with the CDS—and we are going to visit one this week; we are keen to find out how it all works—there have been different voices about this with feedback we have got through the hearings. A glass manufacturer was concerned that, like in Sydney, even though you have got all that glass being funnelled in to the CDS—great—you are still getting contaminated kerbside waste. It is not actually eliminating the contamination at the kerbside, and it is also creating a dual system from an economic point of view. If that can be overcome, that is great. I am just trying to balance out that contamination at the kerbside level, because they were proposing you have a kerbside bin for glass to decontaminate at the kerbside. So they are not saying, 'Don't do anything'; they are just saying, 'Do it at the kerbside because people are socialised to that'. What are your thoughts on that?

Ms BISHOP-FOX: The difference between a glass recycler and me is that a glass recycler wants to crush it all and start again; I am saying, 'Don't crush it'. If we got all the glass out of it, then that would absolutely make a difference. Whether we recycle it or whether we re-use it, that is a very different story altogether.

Ms TAYLOR: Yes, but I am just saying if you have a CDS, you do not get rid of that contamination because it is still going kerbside—they are allowing it in the commingled waste. So by not having a specific bin for the glass kerbside, there is still contamination going in at that level.

Ms BISHOP-FOX: Do you know what a great idea would be? What if there was no glass in kerbside? What if every bottle was taken in whole, every glass had to come back in as it was and broken glass was treated separately?

Ms TAYLOR: That is right—

Ms BISHOP-FOX: This is a different thought process that I have had before.

Ms TAYLOR: But how do you do that with consumers, because they are not all going to travel to put it in the CDS? That is my concern.

Ms BISHOP-FOX: It requires a bit of thought. It is an ambitious goal, I know—

Ms TAYLOR: Because I use those too—I take those re-usable bottles—but—

Ms BISHOP-FOX: It is an ambitious goal and it may take a while to implement. I think the CDS should really be done in stages. To do what I am suggesting in one go could delay it for years to get the structure right, but if it started with plastic bottles and we then thought, 'Let's start with the plastic that we know', maybe add some glass and then think about 'Can we do jam jars?' and 'Can we do sauce bottles and other things as well?', perhaps we could do it in stages and roll it out as we go. I cannot see why that would not work but it does require a lot of thought.

The DEPUTY CHAIR: Just an idea on that: maybe you could make the CDS all about re-usable glass, like washable glass, and the kerbside more or less handling glass that is going to be destined not for re-use.

Ms BISHOP-FOX: Yes. The other concern with glass that is a little bit different to the CDS is that not everyone realises that if this glass breaks, you cannot put that into your recycling. It can only be from the supermarket.

Ms TAYLOR: Yes, that is the point—that is critical.

Ms BISHOP-FOX: Yes, and Pyrex—it breaks as well.

Ms TAYLOR: That is right.

Ms BISHOP-FOX: So if broken glass was treated differently to re-usable glass, then that would really change a lot.

Ms TAYLOR: I did have one more question. Sorry, I will be zippy. Just with the fabrics, I know by—I am sorry to use the example—underwear, within three months that is stretched and in a bad state, and that shows we have got low-quality products. But you cannot buy anything stronger these days. So I am thinking, looking at product stewardship, that we may need somehow—and I do not know if you can legislate—stronger, higher quality products that are going to endure, because I know myself you try to buy things that are going to endure but a lot of underwear just wears out because it is low quality—

Ms BISHOP-FOX: You used to be able to.

Ms TAYLOR: That is right—you used to be able to.

Ms BISHOP-FOX: So it can be done.

Ms TAYLOR: It can be done. So I am just thinking how we would make that happen.

The DEPUTY CHAIR: Could you make items guaranteed or something like that?

Ms BISHOP-FOX: You used to—you used to get a lifetime guarantee.

Ms van ROOSENDAEL: A lifetime guarantee or that they have to be responsible for the waste of those garments at cost.

Ms TAYLOR: Yes, that might be the way.

Ms BISHOP-FOX: There is a manufacturer. What is her name? Stephanie—the Very Good Bra. It is 100 per cent compostable.

Ms TAYLOR: Really?

Ms BISHOP-FOX: Yes. It is not cheap but it is 100 per cent compostable.

Ms TAYLOR: That is good.

Ms van ROOSENDAEL: So that is another way of designing our waste to make sure that for materials that cannot be appropriately biologically circulated there is a premium or a cost to using cheap materials. Potentially you can recycle lots of different types of fabrics that are mixed with poor-quality elastane and synthetics, but that should come at a cost. But there is also a negative invisible waste to garments that have synthetic components like elastane or nylon. They release microplastics into the water, so that is another aspect of waste and waste management that people are unable to really personally manage.

The DEPUTY CHAIR: You could make the manufacturers responsible and then they—

Ms van ROOSENDAEL: Responsible or unable to.

The DEPUTY CHAIR: Yes.

Mr LIMBRICK: Thank you for your evidence today. Ms Bishop-Fox, I wanted to ask you a couple of questions, back to waste to energy. That is always a favourite topic on this committee—it has come up a lot. There are two things in particular. We have learned through these inquiries that one of the big problems with the waste stockpiles that we have—the class 3 hazardous waste, effectively solvent waste—is that there is only one way in Melbourne at the moment that we get rid of that waste, and that is in a waste-to-energy facility. I think it is called Geocycle, and they use that class 3 hazardous waste to create cement. If the only way to get rid of this class 3 hazardous waste, which is still getting stockpiled, is to put it into a waste-to-energy facility, and if we have a moratorium on producing more—so we have got the opposite problem with this facility: it is not that it cannot get enough feedstock; it is running at maximum capacity, and it cannot take any more. The alternative to that, if they make cement using other means, is to use coal, so actually the class 3 hazardous waste is a really good way of making cement because it reduces carbon emissions and all these things. Isn't a moratorium on waste to energy really irresponsible if we are looking at other options of getting rid of this class 3 hazardous waste? In some circumstances where the stockpiles have actually grown they have either caught on fire or been taken over by organised crime and deliberately caught on fire, which obviously is far more environmentally damaging than processing them properly in one of these facilities. What is your response to that, with the class 3 hazardous waste?

Ms BISHOP-FOX: That is a really good question, and I will be really up-front in that I do not know a lot about that plant, so I cannot make a strong comment on that today. I think that perhaps we should treat it separately to municipal waste.

Mr LIMBRICK: Well, yes, we do.

Ms BISHOP-FOX: So a moratorium perhaps could exclude the scenario that you are talking about, particularly its existence in dealing with what it is. But to be building five more plants to deal with just everyday rubbish is a little bit excessive.

Mr LIMBRICK: With regards to the proposed waste-to-energy facility in the Australian Paper mill at Maryvale, my understanding is that they currently use gas for that facility and the energy that they are creating is heat energy, so it is not electricity. They are using that to generate steam.

Ms BISHOP-FOX: Yes.

Mr LIMBRICK: The process of replacing the current heat generation process—that is using fossil fuels—will actually result in greater thermal conversion efficiency, which will lower the carbon emissions. Are you saying that we should continue using fossil fuels at that plant? What are our options there?

Ms BISHOP-FOX: It is complicated, isn't it? And that is where we have to look at things holistically. Waste to energy is quite interesting. For example, the Australian Paper mills are driven by the energy aspect of waste, and some are driven by the waste aspect of waste to energy. There are two sides of the coin. I am not sure what size plant Australian Paper mills need to run their facility alone.

Mr LIMBRICK: It is 220 megawatts of thermal energy that they require.

Ms BISHOP-FOX: Yes, but I am not sure how much waste they need to achieve that.

Mr LIMBRICK: They said it is 600 000-odd tonnes a year of waste.

Ms BISHOP-FOX: They are not putting energy back to the grid at all?

Mr LIMBRICK: No, they are not generating electricity; they are generating heat to create steam.

Ms BISHOP-FOX: And it is quite complex in the sense—

Mr LIMBRICK: They said that they did look at renewable energy options, and there was no industrial heat option.

Ms BISHOP-FOX: What is different with that plant compared to some of the others too that I found quite interesting to learn is that they are actually using the heat and the steam, which is quite different to putting energy back to the grid, which is what most of the plants are proposing.

Mr LIMBRICK: It is quite different because it is replacing fossil fuels.

Ms BISHOP-FOX: It is quite different. The other thing that they have to be aware of is they want half of Victoria's waste to do that. What if that waste is not there?

Mr LIMBRICK: Yes. I do not know. That is a good question.

The DEPUTY CHAIR: All right. I have just got to draw a line on it there.

Mr ATKINSON: Part of the submission, particularly in terms of product obsolescence, is about further regulation, which obviously brings significant consumer cost. But isn't part of the problem, with the very products that you have shown us today, that we already have Government legislation, which is what the manufacturers or suppliers are actually responding to? So in other words, there are contamination issues; there are security, particularly food security, issues. There is quality of goods in terms of goods arriving to the consumer not damaged, and because so much is imported there are shipping issues related to the packaging and so forth. I agree we have got to change behaviours and try to eliminate the problem in the first place, but what have you looked at in terms of current legislation and perhaps overprescribed legislation that is causing a lot of the problem in terms of the packaging?

Ms BISHOP-FOX: I guess the egg cartons are a very simple example with that. They can only be used once. But that is quite small, and we do not import eggs, I do not think. Some of what we have got to get around is what is legislation, what is regulation and what is company policy. For instance, I can take my own containers with me when I go to the butcher's. My butcher happily fills my containers. Supermarkets do not, and they have often used the word 'regulation'. I have seen that written in a forum. It has been written. Now, that could be staff misinterpreting what regulation and company policy is. So I think that is something to get around too.

With packaging and importing things, perhaps we should look at that a real lot. I am talking to the Victorian Government, and I would like to think the Victorian Government is looking at Victorian small businesses. A lot of Victorian small businesses are trying to make this happen, and they are competing with cheap imports who are not being responsible. If the company who imported this was told, 'Okay. You're importing this. You need to change the packaging, and we need to cost charge you for the packaging that you're providing because it is messing with our system, and now our waste companies and our Government have to figure it out'. Perhaps a small business in Victoria might say, 'You know what? We can produce a different kind of product or a similar kind of product and package it differently and package it better'. So perhaps we should be looking locally to solve some of our problems. It may not solve everything, but it would be a really good way to start. Does that answer your question?

The DEPUTY CHAIR: That pretty well brings us to time, so thank you both, Ms Bishop-Fox and Ms van Roosendael. On behalf of the committee, thanks for coming in, thanks for your submissions and thanks for your thorough answers to the questions.

Ms BISHOP-FOX: Yes, and you were asking for some more information.

The DEPUTY CHAIR: Yes, please.

Ms BISHOP-FOX: I forget those questions. Can they be sent through to us directly?

The DEPUTY CHAIR: Yes, we can send them through.

Ms BISHOP-FOX: I am absolutely happy to answer any more questions. I am sure we could have kept going for another hour or so.

The DEPUTY CHAIR: If you would not mind sending your diagrams in too, please.

Ms BISHOP-FOX: Thank you very much.

Witnesses withdrew.