

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into recycling and waste management

Melbourne—Monday, 24 June 2019

MEMBERS

Mr Cesar Melhem—Chair

Mr Clifford Hayes—Deputy Chair

Mr Bruce Atkinson

Ms Melina Bath

Mr Jeff Bourman

Mr David Limbrick

Mr Andy Meddick

Dr Samantha Ratnam

Ms Nina Taylor

Ms Sonja Terpstra

PARTICIPATING MEMBERS

Ms Georgie Crozier

Mr David Davis

Mr Tim Quilty

Dr Catherine Cumming

WITNESS

Mr Bo Li, Senior Policy Adviser, Victorian Local Governance Association.

The CHAIR: I declare open this public hearing. The committee is hearing evidence today in relation to the inquiry into recycling and waste management. The evidence is being recorded. I welcome Mr Bo Li from the Victorian Local Governance Association. Thank you for making yourself available today.

Mr LI: Thank you.

The CHAIR: All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1975 and is further subject to the provisions of the Legislative Council's 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 or misleading evidence to the committee may be considered a contempt of Parliament. You will be provided with a proof version of the transcript in the next few days. The way we are looking at running the session today is that I will give you 5 minutes or thereabouts, and then after that we will ask questions. So we are all ears, Mr Li.

Mr LI: Thank you, Chair. Just for the record, my name is Bo Li, senior policy adviser from the Victorian Local Governance Association. I would also like to extend an apology from Kathryn Arndt, our CEO. She would normally have been at this hearing but she is currently on leave. Our submission has been provided to the committee. I will take it as read. However, I will spend a brief minute or two just going through highlighting some of the issues that are covered in our submission.

As provided in our submission, we have provided some background regarding the current state of play of recycling in the local government sector, but if we just look at the recycling industry in general in Australia, you will note that in 2016–17 the national waste report outlined that 70 per cent of recycled plastics are actually exported and processed overseas. The *National Waste Report 2018* noted that in the 10 years between 2006 and 2017 there has been a long-term increasing trend in the export of waste materials for recycling, except for a decline in 2013–14 and 2015–16 associated mainly with scrap metals. So that is one part of the picture. The other part of the picture is that the amount of material—the waste that has been going to landfill—has been gradually decreasing, partly because of the landfill levy that was put on councils. So there has been a 21 per cent decrease between 2006–07 and 2016–17. So over the same period of time, while we are increasing our export of recycled materials overseas, we are actually diverting materials away from landfill. So we are actually building some of that recycling capability and capacity on our ability to access readily available overseas markets, which has since changed, as members of this committee know.

Just on the landfill levy, as the committee is aware, that is currently sitting over \$500 million. We believe that is an opportunity for many areas of reform. I will go through that in a minute. What I would like to say is that the communities, through councils, have already contributed to that waste recycling initiative through that levy, and it would be unfair for communities or indeed councils to be expected to pay for further initiatives or recommendations that may form out of this committee's report.

On our recommendations, we use the waste management hierarchy, which is an industry standard in terms of managing waste. Under 'Avoidance' we recommend an expansion of the banning of single-use plastics, particularly where there are already products available in the biodegradable market. So we do have cutlery and plates and what have you made out of wood fibres and sugarcane products, and these are available alternatives to single-use plastics. We think an expansion of the banning of single-use plastics in some of those areas where there are commercially available products will be beneficial to avoid waste ending up in either recycling or indeed landfill.

In terms of re-use, we do look for some form of support for councils, because while the re-use of recycled products into council procurement is welcomed, some of those do come with a cost and, as the committee is aware, councils are under rate capping and their ability to invest in the use of recyclable products may be limited without additional support from government.

With regard to recycling, we believe the time has come for Victoria to introduce a container deposit scheme. There are many instances in Australia where a container deposit scheme has been used very effectively to increase the amount of recovered products from waste. That has also been echoed by studies done overseas. So I think there is an opportunity for Victoria to introduce that to, again, divert some of those valuable resources away from landfill into reusable products.

Under the recovery of energy, we have highlighted the use of the recovery of food and organic waste, commonly known as FOGO. We do want to bring to the attention of the committee the fact that the FOGO waste management does require some initial investment by the council. We quoted two examples, where Bayside City Council estimated an additional \$900 000 required to implement FOGO waste management for the 2019–2020 financial year and reducing that to \$320 000 in 2021–2022. If you look at a regional city such as Mildura, they estimated an additional \$2 million would be required in the first year, reducing to \$1.4–1.5 million, and the main reason for that is actually there is no FOGO waste processing centre within 400 kilometres of that particular regional city. So there are some up-front costs required by council, notwithstanding the fact that they will have some reduction in terms of the landfill levy that they will have to pay.

In terms of treatment and containment, we refer the committee to some of the recent work done on material science by the University of New South Wales Centre for Sustainable Material Research and Technology. They have done some innovative work there. I do not have the technical capacity to explain all of those to you, but simply highlighting that material science is an evolving area and that requires perhaps some government incentive and investment into how to recover some of those valuable resources that go into particularly electronic waste that is common in our lives nowadays.

We conclude by just mentioning briefly waste-to-energy plants. I do want to highlight to the committee that the current report by VAGO stated there is no state policy on waste-to-energy plants. We also see waste-to-energy plants as requiring a degree of infrastructure to support them—for example, the initial separation of waste is an important issue, so we get the right feedstock into the incinerators. We also see, in the absence of an overarching state waste management policy framework, that introducing a waste-to-energy plant can potentially undermine some of the other resource recovery efforts that have been done in other areas.

Finally, because of the different regulatory environments, such as landfill levies and emission standards that exist between countries or indeed within countries, it is probably something that the government need to investigate and establish its own evidence base and its own policy framework on those waste-to-energy plants before such plants are commissioned and put to use. I will leave it at that, and I would welcome any questions from the committee.

The CHAIR: Thank you, Mr Li, for your contribution. I am just going to kick off with a number of questions. You did talk about how the landfill levy should be used to assist council to meet its obligations. What are you specifically looking at? I understand there has been some money released recently in response to the China policy to assist council. Are you looking at something beyond that? What are you specifically looking at?

Mr LI: Certainly. If I can take the instance of community awareness and education, for example, there are varying degrees of contamination within our waste stream. People are putting inappropriate materials into the recycling bin. The community education campaign, for example, could be funded through that levy because that is something that would improve the rate of recovery and recycling once that bin is picked up by the council contractor. Similarly, we could also look at how can we standardise the bin colours and bin lid colours. You know, you have some councils with a blue bin with a red lid, some councils with a green bin with a yellow lid, and it is quite confusing for residents, particularly those renters who may move between municipalities, as to what goes into each bin. So again, increase the consistency of products to be recycled once they get picked up.

The CHAIR: Just one more question and then I will pass on to the rest of the committee and come back later. Towards the end you made a statement in relation to how waste-to-energy could undermine the recycling effort. I just want to explore that further. Is that your own opinion or the entire local government's opinion? That is one question. Secondly, are we saying that that be used as an alternative to landfill? For example, let us use the red bin, because that is what we are talking about, which is food waste and commercial foods. That is

going to go to landfill, create methane and various other environmental stuff—that versus the waste-to-energy option. I get your point about not undermining recycling. So can you explore a bit more? Take me through what you are thinking on that. I do not agree with your comments, but I am interested to hear your view on it.

Mr LI: Certainly. Thank you, Chair. I think councils are looking for guidance and leadership in relation to the waste-to-energy front because some stakeholders will see waste-to-energy as a form of recovery of energy whereas some others see it as a form of disposal, because once you incinerate whatever the material it is, it is gone. So if you are looking at the waste-to-energy recovery part of the equation, councils are looking at guidance to look at how or what the regulatory policy frameworks are set by the state government, so whatever decisions that councils do—whether to send materials to incineration or indeed to approve an incineration plant—is consistent with the state regulatory framework.

In relation to my comments about access providing an incentive for recycling, it goes back to my initial comment about a community education campaign and sorting out of the materials so you have a decreased rate of contamination. So only those materials that are fit for incineration do get incinerated, whereas at the moment all the materials get co-mingled. Until we get to a point where we can get a good recovery of those recycled materials from our waste stream, I think having a waste-to-energy plant readily available could act as an incentive for stakeholders to say, ‘Right, okay, we can just send it off to that energy plant and have it burnt’.

The CHAIR: If you put the waste-to-energy option right at the bottom, for example, after you go through the hierarchy which you talked about, which I agree with—I think it is great—as an alternative throw it right down the bottom, something that cannot be recycled either goes to landfill or waste-to-energy. That could be an option. Is that—

Mr LI: Yes. Certainly that is what we said in our submission. What we said in our submission is that until issues such as social regulatory issues have been clarified, until the government—and again this is something that is called for by the VAGO report—does set a statewide policy on that, until that time has come, we recommend that as an option of last resort because it fits in with, you know, the waste management hierarchy, where we do need to actually avoid and recycle and reuse before we look at other methods of waste treatment.

Dr RATNAM: Thank you, Mr Li, for both the submission from the VLGA and your presentation this morning. It has been very, very insightful. Just a couple of questions to start off. So we know that the introduction of the China Sword policy was a significant shock to waste and recycling in Australia and internationally as well. Do you believe there was adequate preparation for the eventual introduction of the China Sword policy? I am happy for you to talk about what you are hearing from councils. Do you feel councils were ready for that? I am happy for you to talk about whether you think the state government provided enough support for councils to be able to manage the introduction of the China Sword policy.

Mr LI: I am not across as to councils having the warning from China directly. I believe through the presentation of other witnesses to this committee that the industry as a whole had been warned prior to 2017 that China was investigating how it could restrict or at least have better quality materials imported through its waste management stream. I cannot speak for individual councils or the council itself, but I certainly am aware that the sector has had some indication that China might be restricting the importation of such materials. And again, I do not know to what extent therefore councils were informed or therefore supported by that shift in the waste management by China.

Dr RATNAM: Have the councils been providing the VLGA any feedback about the type of support they would have wanted from the state government or received from the state government? Were they satisfied with the report they received, or were there gaps in that?

Mr LI: The VLGA is not directly associated with the waste management issues of councils. Those issues, as you probably know, are managed through the waste management resource recovery groups. I know that they will be on this afternoon—

Dr RATNAM: Coming later. That is right. Yes.

Mr LI: So perhaps that question is better asked of them. We do not have that information at hand. I can try and find out some more information for you if you like, but at this point in time I do not have that information.

Dr RATNAM: No problem. That is totally fine. We have heard a lot in the conversation since this issue has really got to crisis points with stockpiling and SKM being told that they cannot receive any more recycling and lots of councils sending their recycling to landfill for an interim period. We have heard in that public conversation a lot of shifting of responsibility to councils, so a lot of commentary that councils were not ready enough, they did not do enough to prepare. Does the VLGA have a response to that? Has it been part of that conversation with councils about ‘What are the roles and responsibility of state government and councils in responding to the broader issues of waste management in the state’?

Mr LI: Certainly. I think, as I responded to the Chair earlier, part of what we see the state responsibility would be is to achieve some sort of consistency across all 79 Victorian councils regarding community education to decrease contamination, increase the rate of recycling and perhaps even to set certain targets and procurements to include recycled products into their procurement stream. That has not happened. We certainly will welcome the committee looking into that as a possible option. Having said that, as I stated earlier, the procurement of recycled products can and does come with some increased operational cost to councils, and that needs to be weighed up in a rate-capping environment to see to what extent councils require support, financial or otherwise, from the state government to assist in the transition to that circular economy, because at the moment that is happening in an isolated environment rather than in a whole-of-government environment.

Dr RATNAM: So in terms of procurement targets—thank you for that response—are you suggesting that having some mandatory procurement targets would be beneficial? That is what I am reading from your submission. And I am just wondering, are you recommending that the state government set those targets for councils, or do you believe that councils should work together and set procurement targets? How do you think the mechanism could actually work in terms of setting procurement targets?

Mr LI: I think a degree of reporting is probably a good way to start, for councils and the state government to voluntarily report how much procurement they do use in the recycled materials space. I notice that the government has put out a release this morning saying some railway sleepers are being made out of recycled plastic. We think that is a great initiative. Again, if you look at small councils, they do not have the scale and they do not have the economies of scale to demand a certain amount of product. If you look at a whole-of-government approach where both state and local government are demanding recycled products, then that generates demand and that generates sector innovation to increase the use of recycled materials. Smaller councils do not have the capacity to order materials at a sufficient scale to do that, but reporting is a good way to see where people are up to, and then if it is appropriate, to set a target—to see it is a reachable target for both state and local government to reach to procure recycled products into their capital works program and the like.

Dr RATNAM: So a whole-of-government approach, you are saying—

Mr LI: A whole-of-government approach is required, yes.

Dr RATNAM: Okay. Fantastic. Regarding your point that those procurement targets will come at a cost, you are saying, given that there are some barriers to entry for local councils—

Mr LI: Particularly for the smaller councils, yes.

Dr RATNAM: Are the councils getting that support to meet those costs at the moment or it is just not even being entertained?

Mr LI: Some councils are applying for grants to various departments and agencies to pilot some of those procurements—you know, road surfacing using recycled concrete and rubber and plastics and what have you—but again I would like to highlight the VAGO report that was released earlier this month to say there is actually no set overall waste management policy, so therefore some of those initiatives are funded through grants as opposed to a whole-of-government approach.

Dr RATNAM: Are you getting any feedback from councils about how successful they are being with those grants?

Mr LI: Councils are getting those grants. I would suggest that they are getting the appropriate support. However, to scale it up to a whole-of-government approach requires a whole-of-government policy.

Dr RATNAM: So it is fragmented and piecemeal as opposed to a whole sector-wide approach.

Mr LI: Yes, at the moment it is not coordinated.

Dr RATNAM: My final question: you spoke about food organic waste. There are a number of councils now that are starting to trial food organic waste collection as part of kerbside collection, which is really welcome. There are some estimates that it could reduce volumes in waste bins by 30 to 45 per cent, which is essentially a game changer in terms of the amount of waste that is going to go to landfill, which will impact things like waste incineration and the volumes that it needs to be viable.

Mr LI: May well do.

Dr RATNAM: What are the barriers to councils expanding food organic waste? What is the barrier to all councils introducing kerbside food organic waste collection?

Mr LI: Again, I will start at community education. There is no consistent community education about food organic waste recycling—what goes into the bin. We had questions asked: can bones from roasts go into the bin? Some councils say yes, some councils say no. So we see that community education to decrease contamination as the first port of call. Secondly, as I mentioned in my opening statement, some councils do estimate that there is an increasing operational cost to process food and organic waste in the order of \$900 000 to \$2 million. In the case of the city of Mildura, because of the fact that there are no processing centres nearby. They have to shift that FOGO waste away to that processing centre, which adds to the overall cost of FOGO waste recycling. That of course needs to be offset—will be offset—by the decrease in the landfill levy, but there will be an initial operational impost on councils introducing the FOGO waste. And again we see the landfill levy as an opportunity to incentivise or support councils to achieve that FOGO waste diversion, which as you mentioned constitutes 30 per cent of our general waste.

Mr LIMBRICK: Thank you, Mr Li, for turning up this morning and presenting to us. I have got a couple of questions around two issues. The first issue I would like to look at and drill into a bit is the container deposit scheme and how you envisage that might work. You mentioned reverse vending machines. Correct me if I am wrong. How I envisage this working is at the moment if I have got recyclable containers, I put them in my yellow bin and then the council takes them away to a MRF and does all the separation. So in this situation I would not be putting them into the yellow bin anymore; I would be collecting them myself in some other container and then I would drive to a facility—presumably a MRF or something like that that is close by—and then I would put them into the machine and get a refund. Is that sort of how it would work?

Mr LI: Yes, it does require some sort of machine to accept the recycled product. Those machines are commonly used in Europe, and also we outlined an example in the City of Wyndham where people put recycled plastics and jars into the machine and a certain amount of credit is put onto a smart card, which then can be used to access pool services or library services run by the council. So it does require, as you mentioned, a degree of personal responsibility to take that recycled product to the reverse container deposit scheme vending machine, so that is one example. The other example is putting 5 or 10 cents on those products, which is already in existence in all mainland states. New South Wales introduced it July last year, I believe. South Australia has been doing it for a couple of decades now—well over two decades now—and their research and all the research that has been done is that in South Australia the overall recycling rate is about 67 per cent against the national average of 51 per cent, so the evidence does stack up for a container deposit scheme. Monash University has done some research on 47 examples of container deposit schemes and they are finding in the average rate of 76 per cent recovered rate for drinks containers, so a container deposit scheme, whether it is done through a reverse vending or just as part of the normal recycling, does improve recovery of those materials.

Mr LIMBRICK: Okay. There are two consequences here though if I am separating my recycling. One is you are going to have a lot more travel involved by individuals and therefore a lot more fossil fuel consumptions and carbon emissions. In my case it is about 10 minutes to the local MRF. For regional areas, I know my parents live out in Gippsland and it is about half an hour's drive, so a 1-hour round trip to the MRF. At the moment they would not be travelling there because it would be picked up from their kerbside in the yellow bin. Is a large increase in carbon emissions due to travel a consequence of this type of policy?

Mr LI: I am not across that particular example that you mentioned. But I do note, as I said, it does require a degree of personal responsibility to drop it off. Or indeed what would happen is—just by way of background, I grew up in Adelaide and we used to send our recycling to the local Scout groups. So it does not need to go to a particular recycling centre per se. If a community member feels that they can donate it, for want of a better word, to their local charity groups, they might want to aggregate that up and put a trailer load of aluminium cans or plastic bottles to the MRF, which then would help them to offset against some of their costs for community groups and what have you. So that is another example of the end beneficiaries in the environment where we are reducing the materials going to other areas of waste management but also hopefully some of the community groups may well benefit as well.

Mr LIMBRICK: What do you see as some of the consequences of fragmenting the recycling stream like this? This would presumably result in a large decrease in the volume going into the yellow bins, so are the consequences for councils of that value decreasing significantly?

Mr LI: At the moment I am talking about the soft drink cans and water bottles, I am not talking about things that would normally go in there such as jars for jam and shampoo bottles and the like. Those will continue to go to those yellow-lidded bins or whatever coloured bin lids that people have.

Mr LIMBRICK: Yellow in my area, but yes.

Mr LI: I think diverting those container deposit scheme products, the products that do attract refunds, I do not see that as having a significant impact into the kerbside recycling by councils because of the fact that most households do not consume those bottled waters or soft drinks on a regular basis. Some may do, but most people, their recycling consists of newspapers and jam jars and the like rather than purely containing water bottles and the like.

Mr LIMBRICK: One other topic I would like to look at: we were talking about procurement policies before. With procurement policies my understanding is that in a market where you have got a product that is of sufficient quality and price, then you do not need a procurement policy. It is only when that product does not meet certain standards or it is more expensive. Is that why you would need this sort of policy?

Mr LI: Yes, as we mentioned in our submission, because our recycling has been largely built on a reliable acceptance of our material overseas—namely, in China and other countries—that in some ways has stifled the innovation research into use of recycled materials in Australia. That is not to say we are not doing it; we are doing it, but we are doing it in a way that perhaps does not either meet with the performance standards or the cost may not be comparable to using virgin plastic or virgin glass for example. So having a degree of procurement reporting and guidelines and targets would in some ways stimulate innovation that is happening within our domestic sector to increase their quality, increase their volume and increase their usage.

I certainly see the China Sword policy as a game changer, but it also represents many opportunities for the government to invest into material research and development so that products made with recycled materials perform just as well if not better than some of the products that we procure currently.

Mr LIMBRICK: So with the procurement policies—because if they are required, then that implies that the product that they are being used to purchase is not market competitive—so do you see the procurement policies as being like a short-term thing until these products become market competitive? Because my concern is that if we are constantly feeding this corporate welfare into products that are not market competitive, they will never become globally competitive and we have just got an industry on permanent life support.

Mr LI: Yes, I appreciate the question. I think what I said earlier was that we need to look at how we can increase the level of transparency and accountability first through voluntary reporting. And through that, as we all know, the sector talks with each other and if council A is using a particular product in its recycling operations, other councils might want to make inquiries with that particular council to say, ‘How is that performance? Have you gone through the rigorous process?’ Needless to say, I think the larger councils have more capacity to investigate and invest in those kinds of procurement practices than some of the smaller councils. So this is where, again, the government could lend a hand to smaller councils to increase the capacity or at least increase the capability to examine some of those products so they can use that in their procurement

stream. But councils are doing it, and I think the latest one was Hume City Council resurfaced the road with bitumen made out of recycled tires and recycled glass and plastics. But to do that initial investment does require a bit of money and some councils are more readily able to do that than others.

Mr LIMBRICK: Yes, because we had another witness at another hearing that ran a recycling plant and they proudly declared that their products are market competitive and do not require any procurement policies because their products are cheaper and better than virgin materials, so in that case a procurement policy might actually act to hurt those companies. I am just concerned about the unintended consequences of this type of policy.

Mr LI: I appreciate that and, again, voluntary reporting would be a starting point.

Dr CUMMING: Mr Li, I have 20 years' experience in local government and I spent a lot of my time on the waste wars, so I feel a degree of deep understanding of this topic. Looking at the VLGA submission I feel that it is a little lacking in the way that it is talking about obviously the China Sword policy as well as looking at—until another country is willing to accept our waste. Does the VLGA have a policy of looking at Victoria being sustainable with its own waste, or do you feel that the VLGA is always going to be looking at sorting waste material and somehow sending it over to poorer countries?

Mr LI: Certainly the VLGA does not have the legislated responsibility to assist councils to look after waste management and so forth. What we said in our submission is that our previous model of waste management to recycled products was built on the readily available market overseas. What we do see with the China Sword policy is, as I said earlier, an opportunity for councils to be part of the state government circular economy framework. That would include things such as procurement of recycled products, and ideally that recycled product would be sourced within Australia using Australian recycled products. If the government can support some of the product innovation and research capabilities, then we think that is a good use of the landfill levy because it does contribute to the circular economy framework by the state government. Councils have the capacity to do that but, as I said earlier, the economies of scale of smaller councils cannot compare with that of state government.

Dr CUMMING: Mr Li, I totally agree. I come from the opinion that we are past the point, due to having an emergency in our waste system, of individual councils doing individual education campaigns and having different bins, with rate capping and a lack of rates to be able to invest. My understanding is that local government a very long time ago, probably 20 years ago, realised that this was going to be an issue when we had a crisis with paper at that time—China was not taking paper. We took the approach that we needed large contracts with multimember councils being able to feed into those contracts, and that is why we have the waste levy that is being collected, so that we could have these large infrastructure projects, that we could go into the future and have a statewide approach towards waste.

I believe that we have to be sustainable with our own waste in Victoria and that we should not be looking at opportunities to send things overseas, because it just does not make sense currently. I would like to hear the VLGA's stance on the current situation—the emergency that I have and we have across Victoria—where we have sorted recycling being filled in empty warehouses, which are becoming fire risks.

I am not quite sure if you realise that part of this committee is talking about solid waste management. I understand that the community has a hate of litter, it has a hate of all the dumped rubbish everywhere. We have a lot of useless waste in our community. We have beaches and rivers that are full of rubbish. It is great to think that we might have these little vending machines that might take one or two bottles, but looking at a larger solution, I am interested to hear about, and it would seem that the state government is looking at, waste-to-energy. I, 10 years ago, went to the New South Wales facility there, and at that time I remember it had to be sorted and had to be a certain size to feed the incinerator, but I recently just came back from Hawaii, and Hawaii has had a waste-to-energy facility since 1990 I think, and they upgraded in 2012 to a better incineration waste-to-energy system that can absolutely take everything. It can take an old couch; it can take large dumped rubbish off the side of the road. It is not dissimilar to the European waste-to-energy facilities where they have the 2019 technology attached to it. This is not just a recycling committee, it is talking about the whole of waste. Would you like to touch on a couple of things that I have mentioned?

Mr LI: Certainly. First of all, you will find that we are in furious agreement that we need a circular economy in Victoria and indeed Australia. Part of our submission also covered the fact that we believe the state government can play a greater part in lobbying the national government to take on a more circular economy in its approach. In regard to your question regarding waste-to-energy, I understand that there are different types of waste-to-energy incinerators available. I am not a technical expert on that particular subject matter, and therefore I cannot give you an informed view on that—others may well do. However, I do want to repeat what I said earlier, which is when we do compare waste-to-energy as a possible solution or part of the solution, we need to consider a range of factors such as: can the land used for the waste-to-energy plant be put to other forms of land use; are the emission standards from those plants consistent between countries or even within a country?

Dr CUMMING: Or European standards, to go to the highest level.

Mr LI: Yes. And therefore what is the amount of fly ash generated from those incinerators and what is the treatment of the bottom ash or residual ash after the material has been burnt?

Dr CUMMING: And can that go into roads or have other uses?

Mr LI: Potentially to concrete making; yes. As I said, I know superficially what they are, but I do not have the detailed technical knowledge.

Dr CUMMING: Fair enough.

Mr LI: But I do want to repeat what I said earlier—that until we get the sorting of materials to a degree and consistency to minimise contamination, we need to look at those solutions first, because that would actually drive some of the recycled products and what have you which sit higher on the waste management hierarchy. If we can achieve that, then we can examine waste-to-energy as to where it might sit on the hierarchy.

Dr CUMMING: Mr Li, would you agree that the community does not have a good understanding of what is recyclable and that it needs a statewide approach, rather than itty-bitty councils trying to do their itty-bitty education campaigns, and having a statewide approach to consistency within our contracts and our bins?

Mr LI: I would agree that the community do need to be better educated about what goes into the bins. We still have councils telling us that they are experiencing people putting nappies into recycling bins, believing they are recyclable when clearly they are not. So a degree of community education is needed to increase the—

Dr CUMMING: Would a nappy be FOGO?

Mr LI: I am not across that particular issue, so I cannot comment on that unfortunately.

Dr CUMMING: But also, Mr Li, would you agree that the community, with their plastic consumption—not just bottles, water bottles or the things that you would buy from a supermarket but plastic consumption in the way of plastic toys and plastic bins and plastic, plastic, plastic, which is not necessarily meant to be single-use but because of the quality of it ends up being rubbish quite quickly—I have found that councils struggle with the amount of plastic—

Mr LI: Councils do.

Dr CUMMING: I guess I would love you to just touch on the kerbside dumped rubbish and litter and those kinds of things. I guess I hear that there is a bit of a fear that if we had a waste-to-energy system, we would not have enough waste, but I look around and I can see plenty of waste that goes into a hole, into landfill.

Mr LI: Sure. I will touch on that briefly. As I said in my opening statement, we believe in avoidance as the first strategy of the day. So when you are talking about excessive packaging, I do agree. I mean, you go into supermarkets and you see bananas wrapped in plastic on a plastic tray. Why should that be the case? So clearly there needs to be something done to reduce the amount of excessive packaging that goes into some everyday products. We believe that the national packaging covenant needs to be renewed and refreshed. That supports our call for the state government to lobby the federal government to increase the measures under the national packaging covenant to reduce the amount of avoidable plastics that go in there. In relation to dumped kerbside

rubbish, I think I cannot speak for the people's minds when they do dump rubbish, but certainly they are trying to—

Dr CUMMING: We would know the tonnage that we throw in, wouldn't we, or we would understand how that compares to our kerbside?

Mr LI: Certainly. I am trying to address, I guess, the behaviour of people who dump rubbish rather than the dumped rubbish itself.

Dr CUMMING: I guess it is not even that. It is just the amount of waste and the tonnage of waste and the understanding of how our waste could possibly feed a waste-to-energy facility rather than going into a big hole in landfill.

Mr LI: Again, I do not know the amount of regulation required for the feedstock to go into the waste-to-energy and what are the emission standards that come out of those plants, because we would not want to have adverse human- environmental impacts of those plants. Again, others will have more technical answers to those questions.

Dr CUMMING: Yes, they seem to happen all over the world, and people's—their health is okay. I mean, Hawaii is a very clean place and Europe is a very clean place.

Mr LI: Yes. I agree.

The CHAIR: I have got a few quick questions for you.

Mr LI: Certainly.

The CHAIR: In addition to the container deposit scheme, which you have touched on, what other changes should we make in relation to the kerbside recycling, for example, to reduce contamination and try to get a good product? Because my understanding is you are able to sell a good product now if you have got a good recycling product, so what other changes would you recommend? You have got the current situation—we put everything in one bin; let us call it the yellow bin. So when people have got the green bin— glass, paper, the lot—what practical solutions are you looking at? Obviously the current model is not working.

Mr LI: Yes, so there are three things I would say to that. First is the community education to improve the materials that go into the bin. That is first. Second, standardise the bins' colouring and the sorting and what have you so that when people move between councils they know which products to put into which bin. And the third issue is looking at how we can reduce contamination. What we have heard from some councils is that the co-mingling of glass into recycled products can increase the degree of contamination. If you are trying to recover plastic, for example, and a shattered glass jar has found its way into that, then that bail of plastic could be rejected because of the contamination. Now, glass is an infinitely recyclable product, so the separation of glass from general recycling product may be another option the Committee can explore.

The CHAIR: Excellent, thank you. Last question from me for the time being. Actually, before I do that, the second-last question—can you take me through what the difference is between your organisation, the VLGA, and the Municipal Association of Victoria? Do you guys operate in the same space? Why have we got two associations? I am just curious.

Mr LI: Yes, I understand. This is not in the terms of reference of this committee. The municipal association is due to speak this afternoon. We are an independent, member-based association. Councils are not required to be members of our association. We do not operate any procurements on behalf of councils in areas such as IT or other contract management, and again the MAV will speak for itself as to what it does.

The CHAIR: So the MAV has got compulsory union membership; you do not.

Mr LI: I would not say so.

The CHAIR: Just joking. My last question. I heard you talking a fair bit about organic waste and so forth. Should we seriously think about banning organic and food waste going to landfill? I mean, because of the

serious community concern? I will give you Ravenhall as an example, where there is a serious concern of residents with the methane, the odour and rubbish going everywhere. Is that something we ought to consider—to basically ban that from landfill and maybe start using that product to be diverted with other processes—whether it is waste-to-energy or whether it is other processes. But there is a strong concern in the community, including mine. So should we be seriously thinking about in the next few years biting the bullet and say: it is time to actually consider banning that going to landfill?

Mr LI: I think before the ban we do need to look at what measures are in place to accept the FOGO waste. As I mentioned earlier, that does come with a cost, but also in the same VAGO report that was released earlier this year, there is a specific recommendation about how we can support multi-unit developments and apartment blocks that are springing up left, right and centre in Melbourne to increase their amount of recycling and organic waste for reprocessing. So I think the answer, before we get to the ban, is to actually invest in the FOGO processing capability throughout Victoria so that rural communities can then have their FOGO waste diverted to an area where it can be reprocessed, therefore diverting it from landfill. I think banning has certain implications. What does it mean if people do breach that ban? Are there any penalties associated? I cannot speak for that. Also, if you ban something, surely there has to be a solution for that before the ban is put into place. So I think the way forward, if you will, is to look at how can we increase the capacity and the reach of the FOGO reprocessing centres before we consider issues such as a ban.

Dr CUMMING: Mr Li and Mr Melhem, I have to say that you have to make sure all the councils and the community have those facilities. And then we also have to look at commercial, industrial and all the restaurants and hospitals. I heard earlier your submission around even \$9 million; it is very costly to councils, with their rate bases, looking for that money to be able to go forward with this. So I hope that the state government looks at their levy and looks at how to help all councils get up to date.

The CHAIR: I think we have two more questions, because we have 5 minutes to go.

Dr RATNAM: Thank you, Mr Li. A couple more questions. You have touched on the VAGO report that came out over the last couple of weeks. What has the VLGA's response been to that VAGO report on our waste policy, or lack thereof, in this state?

Mr LI: We certainly agree with the recommendations that have been put forward, particularly around multi-use developments and how can we support multi-use developments to reprocess their waste better so they do not (a) contaminate and (b) end up in landfill. I think that is a critical factor given the growing population of Melbourne and the densification of our city. The VAGO report did mention that the Planning and Environment Act perhaps should be looked at as to how best support that. While this is not in the terms of reference of this committee, we certainly think the Planning and Environment Act does need to be looked at, particularly given that the new local government bill is about to be introduced into the Parliament later this year.

Dr RATNAM: Great. Thank you. One final question, if that is okay, just going back to the discussion we have been having on incinerating waste. One of the concerns that seems to be popping up with waste-to-energy is there has been an example in the US recently where a private incineration company has been in contractual agreements with councils, as is being sought after here, and that private operator is now suing that council because they are not producing enough waste because presumably their policies to reduce the amount of waste that is going into landfill have been effective, so they have been able to get more out of the waste stream. In the coming period, are you doing any work with councils to ensure that they are as informed and prepared as possible before they start doing any of these contractual negotiations, which, as far as my understanding goes, are on foot at the moment, with Australian Paper trying to secure waste contracts from councils across the state without that information about what has occurred and some of the unintended consequences for councils across the world?

Mr LI: Certainly. I do again reiterate what I said earlier, which is that the state government does need to develop its own policy about waste-to-energy as a first priority, because councils do not have the capability to do that in isolation. They cannot afford to do it in isolation. They need to operate within the Victorian state framework as much as anything else. Therefore the support and the initiatives and the assistance should be provided by the various department agencies such as Sustainability Victoria and the EPA to look at emission standards and so forth and how do you safely handle those materials. I think that is where we believe the

responsibilities and the initiative should lie, and to support that waste-to-energy solution potentially for the state is for the state government to set its policy and for the state agencies to provide the support and initiative necessary to facilitate that at local council level.

The CHAIR: Thanks, Mr Li—

Dr CUMMING: Sorry, just with that, the VLGA does not normally do contracts—

The CHAIR: Dr Cumming, through the Chair please. Mr Limbrick?

Mr LIMBRICK: Yes. I have a question about the recommendation to ban single-use plastics. I assume the objective here is to reduce plastic consumption for environmental benefit. How can we be certain that the substitutions that will happen due to a compulsory ban like this will not result in worse environmental effects?

Mr LI: Okay. As I said earlier, there are products available made with fibre and sugarcane products, for example, to make plates and cutlery, so those are readily compostable. They are sourced from materials that would otherwise end up in other forms of waste treatment. So it avoids the introduction of single-use plastics into our waste stream, and that should be a priority under the waste management hierarchy. When you consider the amount of plastics as generated through single use or packaging, that is quite excessive. I might just look at the example of the banning of single-use plastic bags introduced by Woolworths earlier this year. By their own estimate, 3.2 billion single-use plastic bags are cut out from circulation every year, which equates to 5000 tonnes of plastic that is out of circulation. So—

Mr LIMBRICK: I have also seen that report, but I have also seen others that have said that actually the plastic bag ban has resulted in increased plastic consumption because people are purchasing other bags, the types of bags that we are using and re-using—

Mr LI: The thicker bags.

Mr LIMBRICK: The thicker bags with higher plastic content. There is some contention about whether it has actually resulted in a lowering of plastic consumption.

Mr LI: Certainly, and I do not have that particular research or report so I cannot comment any further. But what we do believe in is an avoidance of single-use plastics into our waste management stream, consistent with the waste management hierarchy, and I think where there are products available that can substitute that from single-use plastic, we should try to encourage that as much as possible.

The CHAIR: Thank you, Mr Li. One quick question from Dr Cumming, and then I remind members that if they have got any other questions, we can actually email them to you if that is okay and seek a response later on.

Mr LI: Not a problem.

Dr CUMMING: Dr Ratnam brought up a great point around a contract in waste-to-energy that was not great. I guess from what I understand of local government over the years, when we see someone like that making a mistake in a contract we then will not make that mistake. My understanding is the VLGA does not normally help councils with their individual waste contracts. Is that correct?

Mr LI: We do not, no.

Dr CUMMING: No, and what my understanding is is the Metropolitan Waste and Resource Recovery Group would normally help member councils and also help try to pool councils together to get larger—

Mr LI: Aggregate—

Dr CUMMING: Is that correct?

Mr LI: That is correct. That is my understanding.

Dr CUMMING: Yes. Thank you. That is it.

The CHAIR: Okay, on that note, Mr Li, thank you very much for your presentation today.

Mr LI: Thank you, Chair.

The CHAIR: Your evidence has been really great, and we really appreciate it. A copy of the transcript will be emailed to you in the next day or so, so if there are any corrections that need to be made, please have a look at that and correct that. And if there are any further questions, we will be sending them to you hopefully shortly. Thank you very much.

Mr LI: Thank you, Chair. Thank you, committee.

Witness withdrew.