

TRANSCRIPT

STANDING COMMITTEE ON THE ENVIRONMENT AND PLANNING

Inquiry into the Environment Protection Amendment (Banning Plastic Bags, Packaging and Microbeads) Bill 2016

Melbourne — 20 April 2017

Members

Mr David Davis — Chair

Ms Samantha Dunn

Ms Harriet Shing — Deputy Chair

Mr Khalil Eideh

Ms Melina Bath

Mr Cesar Melhem

Mr Richard Dalla-Riva

Mr Daniel Young

Participating Members

Mr Greg Barber

Mr James Purcell

Mr Jeff Bourman

Mr Simon Ramsay

Ms Colleen Hartland

Ms Jaclyn Symes

Witness

Mr Rowan Williams (sworn), President, Australasian Bioplastics Association.

The ACTING CHAIR (Mr Melhem) — Welcome, Mr Williams, and thank you for making yourself available; we appreciate that. I am just going to go through some formalities. All evidence taken at this hearing is protected by parliamentary privilege as provided by the Constitution Act 1975 and further subject to provisions of the Legislative Council standing orders. Therefore the information you give today is protected; however, any comment repeated outside is not afforded the same protection. All evidence is being recorded, and you will be provided with a proof version of the transcript in the next couple of days. I invite you to make opening comments or any presentation you wish to make to the committee, and after that we will ask questions. As I said, 5 minutes or thereabouts to give us a bit of an overview. I think you have put in a submission to the committee, so I will leave that with you and then we will ask questions.

Mr WILLIAMS — Okay. I was not sure what format this would take, so I have not prepared a presentation because I thought that was a bit coal to Newcastle.

The ACTING CHAIR — Just a bit of an overview, and if you are happy to take questions straightaway, we are happy as well.

Mr WILLIAMS — Maybe just a brief introduction of who I represent. I represent the Australasian Bioplastics Association. On behalf of members we made a submission to the inquiry. The Australasian Bioplastics Association is the peak industry body for bioplastics manufacturers, distributors, importers et cetera of those materials in Australia and New Zealand. I represent that industry association, but I am also an employee of a company called BASF Australia Ltd, which is a member of this association, and I am currently the president of that industry association. I am happy to take questions because we have made the submission and I would like to get to the detail.

The ACTING CHAIR — Okay, I will start with the first question. Can you take me through, just in layman's terms — let us say for beginners — the difference between your plastic bags, the bioplastic bags, and the standard bag I pick up from Safeway or Coles when I pick up my shopping? In layman's terms, what is the difference between the two?

Mr WILLIAMS — The ubiquitous, grey polyethylene shopping bag that you would get from Coles, as you described, is made from polyethylene, what we would call just a conventional plastic — a common, garden-variety oil-based plastic that is not biodegradable. 'Biodegradable' means consumed by microorganisms — so, a natural process. It will remain in the environment for a considerable period of time when thrown away. A bioplastic, which would be compostable — so, designed for an end of life of organic recycling or in an industrial composting pile — will be consumed by microorganisms and leave no residue other than water, some carbon dioxide and humus, or biomass or compost-type organic material. They are the fundamental distinctions. Your ubiquitous grey shopping bag you described will perpetuate, whereas a biodegradable, compostable bag will be consumed by the microorganisms.

The ACTING CHAIR — So your plastic bag and the Coles plastic bag — I will use those terms — are just let out in the environment. They did not go to landfill and did not go to a special composting processing area. Basically they are just up in the air and finish up in the water. The bioplastic disintegrates over what period? What can happen there?

Mr WILLIAMS — First and foremost, a compostable and therefore a biodegradable bag is not designed to enter a marine environment. It is designed to be treated in a terrestrial environment, which is the general beginning of where marine pollution comes from other than ships and stuff, so it is very much designed for an end of life to collect food waste in a home — so, to be taken home from your shop, used to put your potato peelings in and go out with your green garden organics in the same bin, for example, where the end of life would be a controlled disposal in an organic recycling facility of some description. So first and foremost, we are not promoting this material to solve marine litter. We are trying to stop that happening as well.

The ACTING CHAIR — Right. Are you able to take us through what has been your experience with plastic bag bans in the other jurisdictions around Australia?

Mr WILLIAMS — Sure. When it began with South Australia the only alternative — sorry, not the only allowed alternative but the only certified compostable alternative — were those of the type that my members and we have, which is an Australian Standard 4736 certified compostable bag. That has been quite successful. We have support from the organic recycling industry in South Australia, which accepts those bags and

processes them without incident, whereas if it is a ubiquitous, grey polyethylene bag or these other ones that are also out there — these oxo-degradable bags — if they end up in an organic recycling facility, they will be picked out and sent to landfill. If they know it is a compostable bag, they will process it through without incident. That is the case in South Australia. It is not so prevalent in Australia today; it is being picked up in jurisdictions as we go around — as these bans are allowed — and exemptions for a certified compostable bag are allowed.

The ACTING CHAIR — So basically I am using the bioplastic bag to compost all the food and all the scraps and stuff, as you said, unlike the other bag. The only place you can send it with that scrap food is landfill, but yours actually can go and be composted and be used by other processes.

Mr WILLIAMS — Yes — to be fair, where those composting facilities exist. They are obviously not in every postcode in Australia, but as this rolls out and grows in popularity they can go to these commercial facilities. Equally, the majority of these bags are also home compostable, which can also be done, obviously, in the backyard or garden if those facilities exist. That is also a practice that is increasing.

The ACTING CHAIR — So basically if we are able to combine these bags, we would be able to reduce the need for landfill and to send stuff to landfill. Is that what you are saying?

Mr WILLIAMS — If we are able to — I did not hear your word.

The ACTING CHAIR — We would be able to reduce the need to send stuff to landfill.

Mr WILLIAMS — The idea is if you remove food waste from a landfill primarily, you double the life of your landfill, because 50 per cent of what you are putting into landfill is food waste. So it allows you immediately to double the working life of your landfill — again, hypothetically. But yes, it also gives the food waste a much higher resource recovery value than just putting it in a landfill to generate methane over time.

The ACTING CHAIR — Can you take me through some best practice over the years of plastic bags in other countries?

Mr WILLIAMS — I would just like to get the definition clear. We are talking certified compostable, which is a type of bioplastic. There are many different types of bioplastics. In this context we are talking certified compostable, which brings the inherent property of biodegradability to it.

The best practice I can give you probably is first home composting. France has implemented that all fruit and vegetable bags need to be home compostable from 1 January 2017, so that is now in place for home composting. They could have chosen commercial, but they chose home. In Canada I think something like 4 million Canadian residents all separate their food waste into compostable bags that go to organic recycling across the country. There are the same practices in California. There are programs in New York. It is growing in Germany. It is coming in the UK. South Australia does it. There are many, many examples — a long list — I think I gave references at the end of the submission.

The ACTING CHAIR — Thanks for that. If we look at the bill, for example, one of the elements in the bill is to ban single-use plastic bags.

Mr WILLIAMS — Yes.

The ACTING CHAIR — Would you be supportive of that, or would you be suggesting, for example, that instead of banning it altogether, maybe suggesting using plastic bags instead? There might be a bit of bias in that opinion, but I am happy to listen to the arguments. I think part of this process is listening to industry views and scientific evidence as well. Can you tell me your view on that?

Mr WILLIAMS — Sure, I will try. Of course we would support the banning of single-use polyethylene shopping bags or lightweight single-use shopping bags. We would seek an exemption for certified compostable because of the benefits they can bring in food waste recovery and organic recycling.

Our other issue would also be that a ban on polyethylene may also roll down into other applications where, if banned, what would the alternative be? What is not considered in this discussion is, for example, agricultural mulch film, which is used extensively around Australia as polyethylene, which is currently just landfilled as

well. It is not recycled generally. It is covered in dirt or herbicide or something else. It is either burnt under cover of darkness or thrown down a mine shaft, but it is inappropriately disposed of. There are also biodegradable mulch films that biodegrade in and on the soil, leaving no residue.

The whole issue is if you start with banning a plastic bag of polyethylene, what other polyethylenes do you start to ban and what alternatives to those polyethylenes have you considered?

We start with asking for an exemption on certified compostable shopping bags, and then we look for exemptions to replace polyethylene in these other applications where they cannot be recycled. The key here is that we are not looking to interfere with conventional plastics that can be recycled. For example, your water bottle made of PET has a particularly robust recycling stream which we do not want to interfere with a bioplastic of any description because it is not sustainable and a raft of other reasons. We are looking very specifically that if you ban something, what is the alternative you are considering? That is where we are coming from.

The ACTING CHAIR — Could it be acceptable to maintain the use of polystyrene to prolong or extend the life span of fruit and vegetables? What is your view on that?

Mr WILLIAMS — I think that is also a contextually hard one, because if you talk about polystyrene as the white foam that goes around your television and sensitive electronic equipment, it serves a really important need. It does have the issue of collection and recycling at the end of its life, but just because it cannot be or is not collected and recycled today does not mean that it is not recyclable. There are difficulties in collecting air, which is what polystyrene is. In that context, it is 98 or 99 per cent air, and no-one likes to truck air.

In the context of food packaging, it also serves a very valuable and wonderful packaging need in terms of its thermal this and that and all the rest, but it has the problem at the end of life. If it is contaminated with food, it can only be landfilled.

There are alternatives available for polystyrene that are also biodegradable. If they are food soiled, the alternative to landfill is there, and organic recycling can also consume that. There is a raft of packaging materials that could be replaced by a biodegradable or compostable alternative — not all, but there is a large number that can.

The ACTING CHAIR — Are you aware of the industry looking at putting in any of these new technologies or innovative sorts of solutions into practice and into production in the market at this stage? What is the trend?

Mr WILLIAMS — Compostable trays have been available in, I think, Woolworths or Safeway or Coles, but in very limited quantities because the issue is when it gets to the consumer and it is called compostable, what do you do with it? I think most of us when we get a dirty meat-blood-soaked tray packaged something or other, we are not going to want to handle it too much. We want to put it in the bin and get rid of it. That is a practice thing.

If we were able to turn and say, 'Let's get rid of all these things that can't be recycled or recovered and move the other way to something that can be organically recycled and recovered', then you would have a step change, recognising that a large amount of education and consumer support would be required.

The ACTING CHAIR — The final question from me is about cost. What is the cost between the bioplastic and all these products you talked about versus your traditional polyethylene-type product? Is it a huge difference in cost?

Mr WILLIAMS — I will give it to you in very simple layman's terms again. Polyethylene is based on the price of a barrel of oil. At \$200 for a barrel of oil, polyethylene is relatively expensive. At today's prices, polyethylene is relatively cheap as the base resin from which you make all of these items.

Bioplastics come in many different shapes and sizes and recipes and chemical formulae, but they are largely more expensive because the raw materials are more expensive. However, you can do many things with a bioplastic, such as make it half as thick as a polyethylene, therefore you use a lot less. The end-of-life value proposition is such that you are not landfilling, generating methane, causing emissions, causing greenhouse gases, causing loss of urban amenity and so on and so forth. You are actually generating an organic product that

can go back into horticulture or agriculture and then complete the nutrient loop and grow more food, which I think in about 30 years time we are going to have a bit of an issue with.

When you look at all of that, if you start at the beginning in terms of what does this cost versus what does that cost as the base resin from which they are all made, it is not an apple and an apple. It is an apple and a something else. But the benefits that one can bring compared to the issues you cannot solve with the other is where you need to look at the value, not the cost.

To be quite transparent, if you have got a polyethylene bag that maybe costs 3 cents or a compostable bag that maybe costs 6 cents, compostable bags have been bought by consumers in Australia and consumers have paid 20 cents for them. It has not been a cost to the consumer — of course it has — but somebody has bought it at 6 cents and sold it for 20.

Ms DUNN — It is a margin.

Mr WILLIAMS — If you think about it, there has been a fair bit of value translate because of the value this thing can bring.

The ACTING CHAIR — I think everybody agrees that we need to look after the environment with this pollution issue. That is all agreed. It becomes an issue now for consumers. Consumers obviously want to go and get their shopping bags et cetera and do their grocery shopping and be able to carry it, so we want to make sure consumers are kept onside. On the other hand for providers like supermarkets, there is a cost issue, and that is why I have asked you about the cost. You sort of answered the question: it is a different cost, but if you take the whole-of-life approach, the cost may be negligible.

Mr WILLIAMS — We would argue that has been the case and experience over time, when this has been running for years. The cost of a bag versus the cost of an alternative bag becomes completely incomparable.

The ACTING CHAIR — So are you able to send us, or have you done, any study? Has anyone done any study or analysis on that, any paper or summary?

Mr WILLIAMS — Yes, certainly, there is a lot.

The ACTING CHAIR — You did. If you are able to send us something to that effect in a brief about that question —

Mr WILLIAMS — Sure.

The ACTING CHAIR — and about cost and taking a whole-of-life type approach, we would appreciate it if you are able to do that for us on the committee.

Ms DUNN — Thank you, Mr Williams, for your submission today. I want to go back to the issue Mr Melhem raised earlier, which was around the marine environment. I take your point: you did say that these bags are not designed for marine environments. But I am wondering, should these bags end up in the marine environment — and I mean the two different types of bags, because I see from your submission there is a biodegradable plastic and a home-composting standard, so those two — what would happen to them?

Mr WILLIAMS — Again I have to be careful of generalities because not all bioplastics are bioplastics, but assume they were to be, as you say, certified compostable according to either, say, the commercial standard 4736 or the home composting 5810. Assuming that those materials comply to those standards, they would be marine biodegradable over time, and there is a large body of work going on in many companies at the moment to create a marine biodegradation standard so that we can actually answer that question with scientific evaluation.

There is no standard for marine biodegradation today nor is there a standard, I might quickly add, for biodegradation full stop. There is no standard for biodegradation and there is no universal definition of what that means, so we use the certified compostable standards which incorporate a biodegradation and a disintegration test to prove that the process of biodegradability has occurred. That is easy in a land-based environment or in a home-composting bin. It is a little harder at sea, and that is not meant to be flippant.

We have to replicate those environments and a lot of work is going on around the world, but that takes a lot of time. There is no doubt the process is slower. There is a lack of microorganisms, there is a lack of temperature, there is a high variability of depths and blah, blah, blah. All that is being investigated at the moment. If there is a marine standard developed in the next two, three or five years, then we will have a lot more clarity on what would or would not happen with these materials were they to enter. In the meantime, in the interim, we talk about the terrestrial environments where these things can be contained. We also argue that litter is a behavioural problem, not one of the — —

Ms DUNN — Absolutely. The fact that they got there in the first place — —

Mr WILLIAMS — It should not happen, which I think is a human condition thing, but it is going to happen. We would argue that if we can solve the problem with terrestrial deposition of compostable bags into a proper receptacle as opposed to a fisherman throwing his bait bag out the back of his boat or ships dumping at sea or whatever it might be, we can only solve those problems with materials that we can scientifically deal with today.

Ms DUNN — Yes, that is correct. When you said it would biodegrade over time, at this stage do you have any idea what that timescale looks like?

Mr WILLIAMS — I do not, but we are very close to developing those parameters. It is because of the different weather, it is the pelagic or it is this level or that level of the ocean as to what happens.

Ms DUNN — That is right. Is it on the surface, is it in the depths?

Mr WILLIAMS — Surface, middle or on the base.

Ms DUNN — Yes.

Mr WILLIAMS — It still requires some sort of sedimentary work where the microorganisms are to conduct that process of biodegradation. Floating in the middle, for want of a better expression, is not really sitting still. I cannot think of the correct word, but it is not in a controlled environment, whereas if it is deposited on the ocean floor, for example, then the speed of that biodegradation could or can probably be measured, and that is what they are working on at the moment in many different research stations.

Ms DUNN — In terms of when that work will be completed, was that maybe in two, three or five years to — —

Mr WILLIAMS — There are draft standards in place at the moment for this. In Europe the CEN is working with what they call technical committees to develop those standards, but let me just say there is an awful lot of debate about the where, the why and the how. I mean, developing standards is not a simple process and everyone has a view. I really do not know the time frame, but I am informed by people who do that it is something like two, three or five years — hopefully sooner.

Ms DUNN — Clearly there is a set of specific conditions that are required in order for the two bags that meet the standards to biodegrade. I am just wondering if you can shed some light on those conditions that will make it happen and the difference between that 4736 bag and the home-composting-standard bag. What are the conditions around both of those to enable that bag to biodegrade properly?

Mr WILLIAMS — I am glad you asked that question, because that one I can answer.

Ms DUNN — Happy to oblige.

Mr WILLIAMS — Thank you. For 4736 or the commercial composting standard or, more correctly, biodegradable plastics suitable for microbial treatment, it is measured by time, and basically you need to have 90 per cent of the item converted to carbon dioxide within 180 days, and then you pass the standard. That is the short version. In practice the majority of compostable certified compostable materials will disappear in a commercial composting site in between four and 10 weeks.

Ms DUNN — And is that because of simply the nature of those commercial facilities and the heat?

Mr WILLIAMS — Yes.

Ms DUNN — They are a controlled facility; it is not like a home compost bin.

Mr WILLIAMS — Correct. Yes, they will run it up to 55 or 60 degrees Celsius for a number of days, and the microorganisms go rampant and they eat everything and the polymer is designed to be eaten and it all just happens naturally, no problem. The difference on the home-composting standard again is time and temperature. It allows for a longer time, which in this case is 12 months, at a lower temperature, which is more to mirror the conditions in a home-composting pile, tumble-turn or whatever like that. So commercial composting — short time, high temperature; home composting — lower temperature, longer time.

Ms DUNN — I am interested in where the bags end up in the waste stream. If they end up through a commercial composting facility, that is probably not such an issue, but if the 4736 bag ends up in a home-composting stream — I just want to get it in my head — it is still going to meet the standards for being home compostable.

Mr WILLIAMS — Yes, it will. You are quite right. And because it is highly variable in a home-composting environment I can tell you, as I have taken an oath, that in practice they are gone within six months.

Ms DUNN — You have talked about the compostable bags being transported to commercial organic composting facilities. I am just wondering: do you see that happening via municipal waste programs as a way to get those bags to that composting facility? Is that the mechanism that would be used?

Mr WILLIAMS — That is probably the one that is most prevalent at the moment in places like Armidale or Nowra. I could give you a long list of examples and in fact maybe I will send you that as well. Normally they are designed to go out with the green waste, the green waste is collected at different frequencies, and then it is sent to — I should not say it is dedicated but there is — an organic recycler or someone in that area that will do the collection or will be the receiver of that waste and will treat it appropriately. They are hungry for that feedstock. That composting industry is highly seasonable, and if they are living on just green waste, then it is great during summer and spring.

Ms DUNN — Spring is great.

Mr WILLIAMS — But during autumn and winter they are sitting there looking a little bit idle, so they love to get food waste because the whole idea of organic recycling is the balance between carbon and nitrogen — carbon being your green waste and nitrogen being your food waste. If we are landfilling 7 million tonnes of food waste every year and these guys are crying out for it because they want good, clean feedstock, then the fastest way to do that is to source-separate it in the home, restaurant or hotel, put it in a compostable bag, send it out with the green waste, have it all treated in the one facility, sold as compost or some form of soil amendment or organic, and get it back in the soil.

Ms DUNN — So the weak link in all of that is those municipalities that still do not have green waste collections. That is ultimately the issue.

Mr WILLIAMS — It is an issue. Probably the other issue is the lack of commercial composting facilities, given the high hurdle rate of being able to establish one in Victoria particularly. I mean, it is a classic case of NIMBY; everyone wants to do the right thing but no-one wants to have a malodorous or perceived malodorous processing plant in their backyard, but a properly run one is not like that because it has to meet all the EPA guidelines.

Ms DUNN — I was going to say, there should not be an odour for a well-run one, and I say that from experience. I was a Yarra Ranges councillor who had a significant issue with a composting facility that smelled to high heaven, and I learned a lot about smell.

Mr WILLIAMS — I think we referenced in our submission the Australian Organics Recycling Association, which has a disclaimer and I am also a director of it; its members are the ones who are trying to do the right thing and to grow their industry, as distinct from the waste management industry. They call themselves the resource-recovery industry because they are trying to get hold of this resource to grow their businesses, to

employ more people and so on and so forth. If you get rid of a plastic bag, how are you going to safely and hygienically get that food waste out of the house?

Let us go beyond maybe just the shopping bag. If that extends, say, to a garbage-bin liner, which is maybe in frame as well, if that can also be compostable, then you have got a safe, leak-proof way of getting that horrible food waste — —

Ms DUNN — Yes, you move your putrescible waste on. In an ideal world, from your perspective, I guess that would be happening. You have talked about there being a lack of those commercial-sized composting facilities already. Assuming we just exchanged the single-use plastic bags for these bags, how would the existing facilities cope with what would be an influx — I would think in the millions — of bags, given how many single-use plastic bags are used? I am trying to understand how we would cope with that, with an influx of biodegradable bags.

Mr WILLIAMS — I asked the same question of one of the larger privately owned organic recyclers in Australia and was given the very blunt answer, ‘We’ll tool up for it’.

Ms DUNN — Sorry, can you say that again?

Mr WILLIAMS — I said, ‘If we’re going to send a couple of million compostable bags your way with good, clean food waste in it, how are you going to handle it?’. He said, ‘We’ll tool up for it. We’ll grow, because if you can give us good, clean organics in, we can have very high quality organics out’. Because today they will pick out the polyethylene bag. They will pick out anything that does not look like it should be a compostable bag, send it out the back and it will go to landfill.

Ms DUNN — I guess the market is great enough that they are willing to put resources into picking out bags even out of green waste, rather than trashing organics waste because there is a market for it.

Mr WILLIAMS — I think it is a bit like when you tie up your recyclables in a plastic bag. They do not undo the bag in a processing facility — the whole bag just goes out the back to landfill. That is probably what goes on in practice.

And just a quick comment. You talked about it not being the size of these commercial operations. They are plenty big to handle the contracts that they have got today; it is their geographic location. They are generally getting pushed to outer suburbia for the right reasons — look at Clayton or Brooklyn Green or whatever it might be — because the buffer zones are quite onerous, and the good operating ones generally are the ones you never hear about. Unfortunately, like any industry, it is the ones that do not play by the rules that are the ones that bring down the rest of the industry.

Ms DUNN — So does that make it an issue if you have to transport your waste — like, is there a definite ratio between the cost and benefit the further you have to transport your waste? Is that it in a nutshell in terms of geographics?

Mr WILLIAMS — I am not a logistics expert, but yes of course. The more you have to collect, the more you have to transport and there are cost issues, but I am also aware of the argument that if you had food organics in with green organics and you had a denser load to collect, you could collect it more frequently, you could process more, which causes offsets to the transport costs you incur. So the economics can shift dramatically.

Ms DUNN — Yes, because of volume, and in terms of that comment around ‘we’d tool up for it’ — I take from that that the private sector would certainly be willing to put in the resources required to do that work and would not be looking to governments necessarily to assist with that tooling up.

Mr WILLIAMS — I cannot speak for what they would or would not want. However, I would say that when I have put it to them that ‘If we can double the size of your business by sending you 100 000 extra tonnes of material or 100 000 widgets, would you be interested?’, I think anyone in private enterprise is quite keen to grow their business the right way. I have not met any resistance to this whole concept of getting compostable plastics into the mix provided they do what they say, which is why certification is key. We do not want these things that are there today, which are these oxo-degradables that are not certified, that do not biodegrade but

they are sold as an oxo-biodegradable material, which they are anything but. That is an ACCC issue, but unfortunately the answer there is that that is not in the public interest. Well, I tend to differ.

Ms DUNN — Having had to try to pick those bags up on Clean Up Australia days, where they just break into hundreds of little pieces, they are very problematic. So you do not actually think that there is going to be an infrastructure issue if there is a huge influx of biodegradable bags into the composting, recycling stream?

Mr WILLIAMS — Not in practice; not when we know how quickly these things actually do biodegrade in practice in a properly run facility, no. You have six months to conform to the standard. Again we insist that standards are there for a reason — they address the need and they guide the industry. But with these bags, these films, I have seen incredibly thick ones disappear in six weeks, which has caused no issue to the processor. So having the increased volume of course there would be different ways to process — speed, time and all the rest of it — but they are not insurmountable.

Ms DUNN — Yes; okay. In terms of the bill, it seems you would support the ban for single-use plastic bags that are manufactured out of polyethylene. You would want an exception for biodegradable bags and better certification so that if we are talking biodegradable bags they are actually certified to those industry standards, so you can be assured that they are.

Mr WILLIAMS — We would couch it that we want an exemption for certified compostable, because that is what will give you the inherent property of biodegradability. Biodegradability as a statement is insufficient — it does not tell you when, it does not tell you where, it does not tell you what is left behind if indeed it does occur. It does not give you any of those measures, which is why the oxo-degradable, oxo-biodegradable — where, when, into what? If you have a certified compostable to either of those Australian standards you know what the outcome is going to be — it has been tested, it has been tried, it has been done around the world for 10 to 15 years, it is proven, it is scientifically robust. So we would argue for that.

Ms DUNN — Yes, you would absolutely support the bill as it sits but look for those exemptions, particularly around certified compostable.

Mr WILLIAMS — Certified compostable; indeed.

Ms DUNN — In terms of the manufacture of these bags, are you able to provide any information in relation to where they are manufactured — are they manufactured here, overseas — and what that looks like?

Mr WILLIAMS — Today the majority of single-use polyethylene bags that come into this country come from overseas — they are imported. I think the number is 96 per cent, maybe higher.

Ms DUNN — You might be the only person who has been able to tell us that so far, just by the way.

Mr WILLIAMS — I do not know the exact number, but it is greater the 90 per cent. Very few people make them here.

Ms DUNN — What about the certified compostable bags? Where are they generally made?

Mr WILLIAMS — Generally overseas as well. The good news here is that you have got a plastics processing industry in Australia which is suffering from the downturn in automotive and downturn in all the other downstream industries that they used to supply, who process polyethylene for other things — you know, hoses and pipes and other bits and pieces. If they are producing a film polyethylene they can also produce a film by a plastic using the same equipment generally. So they can get rid of the polyethylene film and replace it with a compostable film with a few modifications to their existing equipment. Thus the industry continues. That is a generalisation because I do not know everybody's equipment, but they are designed to run on the same equipment — to drop in for polyethylene, which is a nice thing. So please, if they stop using it tomorrow, they can start using another resin tomorrow morning to make exactly the same film.

The ACTING CHAIR — One last question from me: is it a state approach or a national approach? What would be the preference of your industry if we want to put in legislation?

Mr WILLIAMS — I think we would all love something to be nationally endorsed, but asking Australians to do anything nationally other than take a public holiday is getting pretty hard to do. I would argue that probably

to replicate what has been done in the states is the smartest measure because you have already got Northern Territory, South Australia, Tassie and other places that have already implemented these bans that you are considering and have already got good experience as to how that has developed over time by driving down polyethylene consumption, or single-use plastic bags, and people who have chosen to use a reusable or their own calico, or whatever other bag, have made the decision, and compostables have benefited the organic recycling industry where it exists, so it is not a one size fits all. Water has found its own level over time. I have made my comment about national, but I would love to see the state approaches that have already been taken be replicated.

It has worked well in other countries. What I did not see in any of this was the consideration of the examples from overseas, like in the UK, where their taxes have gone on polyethylene to give hypothecated funding to this food waste source separation. There are other options in there which we would like to discuss, and today there is no time for that, but these are the other options that you have got to address your issue of cost. I would argue it is a value proposition as opposed to a cost issue because of the downstream value you are getting in this resource recovery, which is not immediately apparent when you get rid of a polyethylene bag and you substitute it with a compostable one. Now you have got a way of picking up a couple of million tonnes of organic waste and doing something with it other than trying to find a hole in the ground to put it in.

Ms DUNN — While I was listening to your answer I was thinking about the habits of people in terms of their domestic waste. If you think of garbage at the moment that goes to landfill — that bag — it generally contains that putrescible waste that you cannot compost yourself or will not go in your green waste bin, and it will also contain a whole lot of packaging that is not recyclable. I guess in terms of what you are suggesting it is creating another waste stream management that has to be managed at that domestic level, so essentially there is a fourth bin that is about putrescible waste. You have got putrescible waste, compost, recyclables and green waste.

Mr WILLIAMS — I guess that is a possibility, but I guess the obvious or the smarter way might be to combine what they call FOGO, or food organics-green organics, in the one bin and have that collected at the one time to go to the one place, but we need to think about how that works in practice. Again I am not a logistician — I do not know all the ins and outs of that — but it does work in other places around the world, like in Milan in Italy and in Germany and France, where they have come up with ways that they have actually found they can collect the residual trash less often than before and save money because now the resident is actually teasing more out. I might quickly add in the 1970s when the little black plastic crate was thrown on your driveway and you were told to put your glass and everything in it everyone said ‘I’m not doing that’, and here we are 30–40 years later, and we are all conditioned to separating out cardboard, glass et cetera every Thursday night or whatever it is. Why is food waste any different?

Ms DUNN — That is right. Yes, fair enough.

Mr WILLIAMS — Why should it be allowed to just be landfill? It is just another form of recycling. Why not?

Ms DUNN — Thank you, Mr Williams.

The ACTING CHAIR — Mr Williams, thank you very much for your contribution, and I look forward to the paper you are going to send to us about the costing. That would be great. A transcript will be emailed to you in the next few days for you to proof and send back to us, and the secretariat will be in touch with you. I am looking forward to the information you are going to supply to us. Again, thank you.

Mr WILLIAMS — Thank you, sir. Thank you, madam.

Witness withdrew.